FINANCIAL LITERACY EDUCATION AND RETIREMENT PLANNING OF THE URBAN ELDERLY IN MALAYSIA

VISYALINI SELVADURAI

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ABSTRACT

Financial literacy education and retirement planning has recently been highlighted as the contributing factor towards successful retirement planning. The purpose of this study is to identify the key determinants affecting financial retirement planning for the urban elderly in Malaysia. The main key determinants focused in this thesis were demographic, financial attitude, financial education and financial literacy factors. This research applied both quantitative and qualitative methodology. Data was collected through survey and interview. The first survey and second survey were done among 1239 and 623 elderly individuals respectively in the Klang Valley. Simple random sampling was used to select elderly individuals based on electoral roll. Interview was also conducted with ten elderly individuals in the Klang Valley. Purposeful sampling was used in the selection of elderly individuals for interview. Descriptive and inferential statistics were used to analyse the quantitative data. Thematic analysis was used to analyse the qualitative data. In the first cohort of survey, the findings of binary logistic regression analysis depicted that the level of education, owning luxury amenities and minimum monthly expenses were vital determinants of managing monthly expenditure for elderly individuals. Furthermore, in the second cohort of survey the Pearson's chi-squared in the cross-tabulation showed that age, gender, ethnicity and education level were significant factors that determined financial retirement planning. The Cramer's V values showed that there was a positive relationship between age and comfortable retirement and monitoring spending .There was a positive relationship between gender and asset ownership, comfortable retirement, duration savings to last, estimation retirement savings and financial planning ways. Moreover, there was a positive relationship between ethnicity and comfortable retirement, duration saving to last and monitoring spending. There was a positive relationship between education level and ownership of assets, comfortable retirement, duration savings to last, estimation retirement saving, financial planning ways and monitoring spending. Further analysis using multinomial logistic regression indicated that male, duration saving to last (11and above years), productive income, non-productive income, direct dependency, both dependency, neglect spending, figuring out financial planning ways through family, friends and counseling, age 64 below, very confident with retirement because they have enough money to live comfortably throughout their retirement years and very confident with retirement because of family support were the important factors which determine the financial retirement planning. The qualitative result also suggested that mastering financial literacy was essential in planning for retirement. The analysis of interviews also indicated that psychological aspects like individuals' initiative in setting monetary goals, individuals' exposure on managing financial matters and individuals' level of financial awareness contribute towards successful financial retirement planning. The findings provided essential insights to policy makers and governments in both developing and developed countries on the crucial determinants of financial literacy education that need to be emphasised to ensure successful financial retirement planning. Importantly, this study has contributed to the development of financial retirement planning conceptual model of the urban elderly which aids elderly individuals in enhancing their financial literacy education and planning their retirement well.

PENDIDIKAN LITERASI KEWANGAN DAN PERANCANGAN PERSARAAN DARI PERBANDARAN DI MALAYSIA

ABSTRAK

Pendidikan literasi kewangan dan perancangan persaraan baru-baru ini telah diketengahkan sebagai faktor penyumbang ke arah perancangan kewangan persaraan yang berjaya. Tujuan kajian ini adalah untuk mengenal pasti penentu utama yang mempengaruhi perancangan kewangan persaraan dari perbandaran di Malaysia. Faktor-faktor utama di dalam tesis ini tertumpu kepada demografi, sikap kewangan, pengetahuan kewangan dan literasi kewangan. Tesis ini menggunakan kaedah kuantitatif and kualitatif. Data dikumpulkan melalui dua kajian yang berbeza. Kajian pertama dan kajian kedua masing-masing melibatkan 1239 dan 623 individu warga tua dari Lembah Klang. Persampelan rawak mudah digunakan untuk memilih individu warga tua. Temubual yang melibatkan sepuluh individu warga tua di Lembah Klang juga turut dikendalikan. Persampelan bertujuan digunakan untuk memilih individu warga tua dari Lembah Klang. Deskriptif dan inferensi statistik digunakan untuk mengkaji data kuantitatif. Analisis tematik digunakan untuk mengkaji data kualitatif. Hasil analisis regresi binari logistik untuk kohort pertama kajian menggambarkan bahawa tahap pendidikan, memiliki kemudahan mewah, dan jumlah minimum perbelanjaan bulanan adalah faktor-faktor penting dalam menguruskan perbelanjaan bulanan bagi warga tua. Tambahan pula, nilai *Pearson's chi-squared* dalam *cross-tabulation* menunjukkan umur, jantina, etnik dan tahap pendidikan adalah faktor-faktor yang penting untuk menentukan perancangan kewangan untuk persaraan. Nilai *Cramer's V* dalam *cross-tabulation* menunjukkan bahawa hubungan antara umur dan persaraan yang selesa dan pemantauan perbelanjaan adalah positif. Hubungan antara jantina dan pemilikan aset, persaraan yang selesa, simpanan jangka masa lama, simpanan anggaran persaraan, dan cara-

cara perancangan kewangan adalah positif. Selain itu, hubungan antara etnik untuk persaraan yang selesa, penjimatan jangka masa lama, dan memantau perbelanjaan adalah positif. Hubungan antara tahap pendidikan dan pemilikan aset, persaraan yang selesa, simpanan jangka masa panjang, penjimatan persaraan anggaran, cara perancangan kewangan, dan memantau perbelanjaan adalah positif. Analisis selanjutnya menggunakan regresi logistik multinomial menunjukkan individu lelaki, tempoh simpanan akan berakhir (11 tahun dan ke atas), pendapatan produktif, pendapatan tidak produktif, pergantungan langsung, kedua-dua jenis pergantungan (langsung dan tidak langsung), pengabaian perbelanjaan, mendapatkan cara-cara perancangan kewangan melalui keluarga, rakan-rakan dan kaunseling, mereka yang berumur 64 tahun dan ke bawah, sangat yakin dengan persaraan, dan sangat yakin dengan persaraan kerana sokongan keluarga adalah penentu yang ketara bagi menentukan perancangan kewangan untuk persaraan. Keputusan data kualitatif mencadangkan penguasaan literasi kewangan adalah penting dalam perancangan kewangan untuk persaraan. Analisis temu bual juga menunjukkan bahawa aspek psikologi seperti inisiatif individu dalam menetapkan matlamat kewangan, pendedahan individu mengenai pengurusan hal-hal kewangan, dan tahap kesedaran individu menyumbang ke arah perancangan kewangan untuk persaraan yang baik. Dapatan kajian memberi makluman yang penting kepada penggubal dasar dan kerajaan di kedua-dua negara maju dan sedang membangun mengenai faktor utama pendidikan literasi kewangan yang perlu diberi penekanan untuk memastikan perancangan persaraan yang berjaya. Kajian ini telah membangunkan model konseptual perancangan persaraan kewangan warga tua dari perbandaran di Malaysia. Ia akan membantu warga tua dalam meningkatkan pendidikan literasi kewangan dan merancang persaraan mereka dengan baik.

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P1; 94-95	: This is an example of coding for interview transcripts. The first alphabet ‘P’ refers to Participant and followed by number ‘1’ refers to Participant 1. Number 94-95 represents the number of lines where the quotation starts and ends in the transcript.
BOT	: Bantuan Orang Tua
CPF	: Central Provident Fund
DV	: Dependent Variable
EPF	: Employees Provident Fund
EU	: European Union
FIMM	: Federation of Investment Managers Malaysia
FLEC	: Financial Literacy and Education Commission
GFC	: Global Financial Crisis
GPA	: Grade point average
HDB	: Housing and Development Board
HPS	: Home Protection Scheme
HSBC	: Hongkong and Shangai Banking Corporation
IDRE	: Institute for Digital Research and Education
INFE	: International Network on Financial Education
IPs	: Integrated Shield Plans
IV	: Independent Variable
KWSP	: Kumpulan Wang Simpanan Pekerja
LCH	: Life Cycle Hypothesis
LTC	: United States Long-term Care
MA	: Medisave Account

MELOR	: Malaysian Elders Longitudinal Research
MISI	: Manulife Investor Sentiment Index
ML	: Multinomial Logistic
OA	: Ordinary Account
OECD	: Organisation for Economic Co-operation and Development
PHS	: Public Housing Scheme
PISA	: Programme for International Student Assessment
PMIS	: Private Medical Insurance Scheme
PPA	: Private Pension Administrator
PPS	: Private Properties Scheme
PRS	: Private Retirement Scheme
SC	: Securities Commission
SEM	: Structural Equation Modeling
SES	: Socioeconomic Status (SES)
SOCSO	: Social Security Organization
SPSS	: Statistical Package for the Social Sciences (SPSS)
TIAA-CRFF	: Teachers Insurance and Annuity Association of America - College Retirement Equities Fund
WISER	: Women's Institute for a Secure Retirement

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CHAPTER 1

INTRODUCTION

Overview

Retirement is an essential life event which is experienced by every individual. Comfortable retirement requires a sensible planning. Individuals who do not give importance to retirement planning will have difficulties in accumulating sufficient wealth for their retirement period in most of the countries including Malaysia (Ministry of Finance Ontario, 2014; Nathan, 2015). Thus, with the increasing number of elderly the issue of retirement planning has been crucial and the financial retirement planning has given importance by the government. This first chapter aims to provide an overview of the thesis.

It explains the significance of carrying out a study on the key determinants of financial retirement planning which contributes in helping individuals to plan their financial well-being for retirement. It introduces the background of financial literacy education and planning issues. Then, it explains the statement of the problem of this study. Theoretical, conceptual framework and also the hypothesis of this study are clearly stated in this chapter. Purpose of carrying out this study, essential objectives and the pertinent research questions of this study are written precisely. Significance of the study, limitations of this study, definitions of important terms used throughout this study are stated in this chapter and it is ended with a brief summary of introductory chapter.

Background of the Study

Financial literacy education has been recently been highlighted as the contributing factor towards successful retirement planning. A number of policy makers and economists stated that financial literacy education is essential in ensuring financial comfort (Meier & Sprenger, 2013).Can individuals effectively manage their financial well-being without proper guidance? Policy makers concluded that financial literacy education is a necessity solution to make financial decisions in the global monetary crisis period (Fernandes, Lynch & Netemeyer, 2014).

It was proven in a survey carried out in America that, those who have financial literacy education are more likely to plan their finances successfully and these individuals used retirement calculators, attended retirement seminars, and asked for help and advices from financial experts, instead of relying on their family or relatives or co-workers to plan their finances (Lusardi & Mitchell, 2011a). Experts are defined as individuals who have special skill or knowledge that are derived from training or experience (Expert, 2017). It was recommended that significant variables which contributed towards individuals' financial well-being needed to be carefully examined due to the increase in the cost of living, change of lifestyle, and consumption pattern among Malaysians (Zaimah et al., 2013).

A lot of individuals are taking the responsibility to secure their financial wellbeing upon retirement in the United States and also around the world(Lusardi &Mitchell, 2011b). However, it was found that African Americans did not save very much regularly and accumulate money to be used upon retirement (Blanco, Ponce, Gongora & Duru, 2015). Even Malaysians found that having sufficient savings upon retirement is a challenge (Suhaimi Abd Samad & Norma Mansor, 2013). In Malaysia, both young and older individuals have lesser level of financial literacy education. They are not exposed much about the basic financial literacy like concepts, with thoughtful effect of saving, retirement planning, mortgages, and other decisions (Krishna Moorthy et al., 2012). Over the time societies have developed various ideas about what is old age and how older people live their lives. Cho (2012) discovered that elderly individuals consider themselves as healthy when they have more financial resources. In Malaysia, individuals are considered elderly when they are 60 years and above (Ministry of Women Family and Community Development Malaysia, 1982). A handful number of research and policy has been progressively focused on the elderly, and researchers have been seeking ways to figure out the preparedness of elderly to face financial readiness upon retirement.

A study found that within the European Union, it was estimated that by 2020, around one third of the population will be retired, one third will be of working age and one third will consist of young people who have yet to enter the workforce (Lewis & Tam, 2012). In the recent report published in the World Bank data, total population in Malaysia in year 2013 is 29.72 million and it is estimated to grow to 38.6 million in 2040. In addition, the data from the statistics department shows that from January 2006 until January 2014, there is an increase in the population in Malaysia (Department of Statistics Malaysia, 2015). The latest population is 30.4 million in January 2014 compared to 25.8 million in January 2006. The data is illustrated in Figure 1.1.

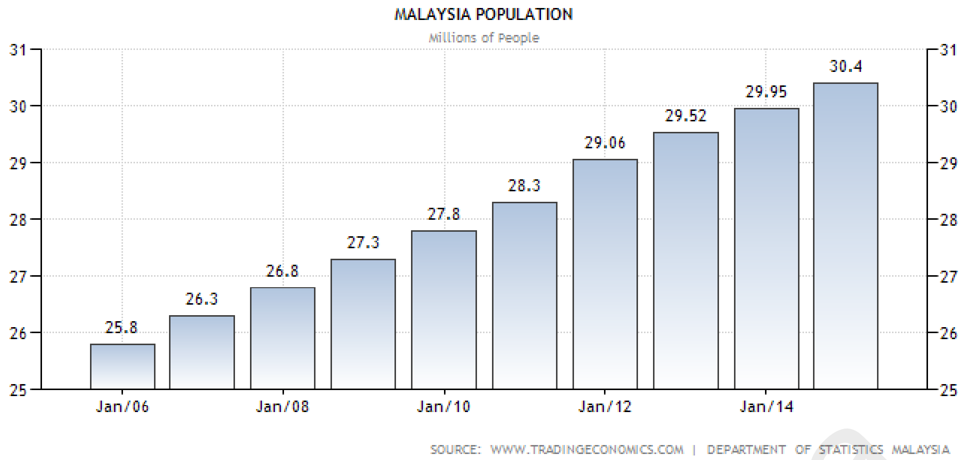

Figure 1.1 Malaysia Population (January 2006-January2014).

Adapted from *The Source of Malaysia's Official Statistics*, by Department of Statistics Malaysia, 2015. Copyright 2015 by the Department of Statistics Malaysia Official Website.

The recorded data from statistics department indicated that 50 years ago the total population in Malaysia was 8.2 million in 1969 (Department of Statistics, 2015). There was an addition of 271 per cent of population in the latest statistics. The data is illustrated in Figure 1.2.

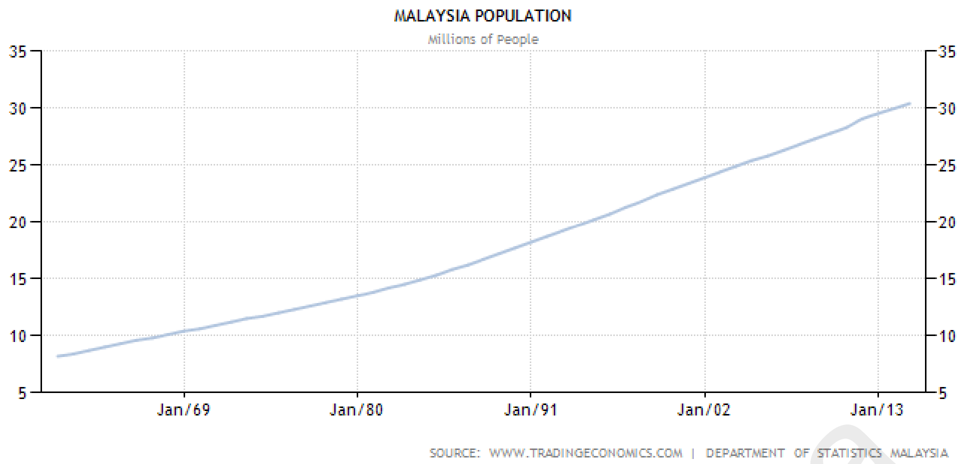

Figure 1.2 Malaysia Population (January 1969-January2013).

Adapted from *The source of Malaysia's official statistics*, by Department of Statistics Malaysia, 2015. Copyright 2015 by the Department of Statistics Malaysia Official Website.

The report from United Nation in New Zealand showed that the number of elderly who are aged 60 years and above was predicted to increase from 841 million people in 2013 to more than 2 billion in 2050. In addition, the number of elderly was predicted to go beyond the number of children for the first time in the year 2047 (United Nations, 2013). Besides that, the statistical report from United Nation in New Zealand also indicated that in the coming decades, life expectancy at birth was predicted to continue to grow.

The population of ageing individuals was occurring faster in developing countries compared to the developed countries (Chen & Tumer, 2006; Kinsella & Wan, 2009, p.10). The data provided by Teerawichitchainan & Konel (2015) showed that Malaysia as one of the developing countries will surely experience an increase in number of elderly in future. Rapid population ageing can be very challenging as developing countries will likely to experience ageing at lower levels of income (Canning, 2007).

Figure 1.3 shows that in 1950 in the more developed regions the life expectancy was 65 years. In contrast, in less developed regions life expectancy was only 42 years. It was also predicted that by 2045-2050, life expectancy would reach 83 years in the more developed regions and 75 years in the less developed regions. Life expectancy has increased as there are better health care then there was many years ago.

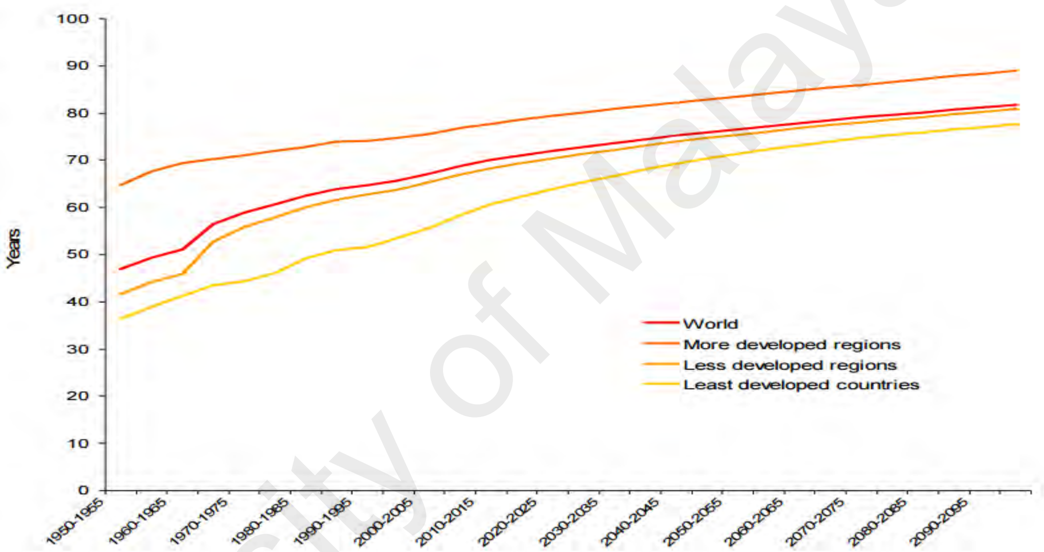

Figure 1.3 Life Expectancy at Birth: World and Development Regions.

Adapted from *World Population Ageing*, by United Nations, Department of Economic and Social Affairs Population Division, 2015, p.6. Copyright 2013 by United Nations, New York.

According to Suhaimi Abd Samad, Halimah Awang and Normah Mansor (2012), there was an increase in life expectancy, change of demographic and family structure among Malaysian citizens and these caused an increase of aging population in Malaysia. Suhaimi Abd Samad et al. (2012) stated in the report of the International Conference that, by 2030 Malaysia is predicted to have an ageing population when the population is 15 per cent elderly. Global aging that affects both developing and developed nations will significantly change the way societies and economies work (Bloom, Canning & Fink, 2011).

The common issues of global aging include, "how individuals find fulfilment, at what age they retire, and their quality of life once they retire; how governments devise social contracts to provide financial security; how elderly and younger generations interact as they divide up the economic pie; how businesses staff their jobs to compensate in many countries for shrinking workforces; and how health systems respond to the altered needs of those living longer"(Schwab, 2012, p.2).

Retirement is needed mostly by elderly people who are usually aged 55 and above. The current minimum retirement age in Malaysia according to the Minimum Retirement Age Act 2012 (Act 753) is at the age of 60(Act 753: Minimum retirement age act, 2012*)*. Retirement age is the period when the individual decides to leave the workforce permanently (Knoll, 2011). After retirement, the elderly people will start a new phase of life with their family and friends (Lai & Comeau, 2012). Retirement age policy is given utmost important in all over the world due to the current lifespan of population that has been becoming longer. This policy supports the labour force participation of elderly employees.

Malaysia, an upper middle income country, with a population of 28 million is no exception. The ageing population of 60 years and above is rising steadily from 5.7% in 1990 to 6.3% in 2000 and is expected to be 9.8% in 2020 (Ambigga et al., 2011).In Sweden, the retirement age is 61 and to those who would want to continue working they are entitled to work until the age of 67. A study in Scania which investigated the factors that influence elderly to continue working upon retirement found that, 54% of the participants stated that they "can" and 38% that they "want to" work until age 65 years or beyond (Nilsson, Hydbom & Rylander, 2011).They contended that one of the main reasons for the continuation of working upon retirement is the economic factors like personal finances and retirement incentives. For instance, individuals continue working beyond their retirement age as they would want to get a better pension.

In Malaysia, Benjamin, Laily, JariahMasud and TengkuAizan Hamid (2010, p. 128) carried out a study in Malaysia on financial aspects among elderly workers and they found that only 512 respondents out of 2,327 respondents had an average median of RM18, 500.00 in their Employees Provident Fund (EPF) account and out of 512 respondents only 222 of them had an average median of RM12, 000.00 in their EPF account. The researchers also provided information related to the issues in employment and financial factors among elderly and they also provided recommendations in enhancing the employability and financial security among Malaysian elderly. In order to add up the values on financial literacy education and retirement planning, the key determinants affecting financial retirement planning for the urban elderly in Malaysia should be identified and pertinent financial planning model should be developed based on the key determinants and is used as a base to improve on financial retirement planning aspects especially for the elderly in Malaysia.

Statement of the Problem

The era of globalization has resulted in improved standards of living and increased of life expectancy over the past years. Elderly individuals above 60 years are increasing day by day because most countries around the world are experiencing lesser numbers of mortality rates (Suzman & Beard, 2011). In future, there will be more elderly than children and there will be increase in the amount of elderly employees due to societies and economics transition. Over the years, the labour force participation of older people aged 60-64 is increasing (Copeland, 2014). Therefore, the issues related to elderly have been becoming crucial.

Due to long life span, many elderly continue finding for source of income for survival. The decline in death rates among elderly causes the proportion aged 80 or older increasing very fast and more elderly are living past 100. Therefore, with pertinent policies and programmes, elderly continue to be healthy and independent and they can also continue contributing to their communities and families (Suzman & Beard, 2011).

Hiscott (2013) carried out a study in Canada to explore factors related to post-retirement employment among Canadian elderly who continue working upon retirement. He found that that there were a number of elderly continued with paid work in the labour force upon retirement as they felt that they were being forced to retire while their financial status was not stable. Many individuals failed to make relevant financial decisions and these affected the financial well-being in the future. For instance, more than 50 per cent of Canadians spent their income without considering their financial future (Soman, 2011). The low-income groups were the most affected ones as failure in making relevant financial decisions affected the financial and economic stability, individuals or the households negatively (Russia's G20 Presidency & the Organization for Economic Cooperation and Development, OECD, 2013).

Conversely, this was not feasible for many elderly because the data in Figure 1.4 on potential support ratios (the number of working –age persons per one older adult aged 65 and older) in 25 Asia Pacific countries, 2000-2050 by

Teerawichitchainan and Knodel (2015) showed declining figures of working number of older adults in the majority countries. In majority of the Asia Pacific countries, the support ratio has already deteriorated between the year 2000 and 2015. In Malaysia, by 2050 there will be only 4 working-age Malaysians for every individual aged 65 and above (Teerawichitchainan & Knodel, 2015, p.13).

Country	Year				% decline 2015-2050
	2000	2015	2030	2050	
Bangladesh	14.5	13.6	9.1	4.1	-70%
Bhutan	14.3	13.5	9.6	4.0	-70%
Cambodia	14.4	11.2	7.1	3.9	-65%
China	9.8	7.7	4.2	2.6	-67%
Cook Islands	n.a.	n.a.	n.a.	n.a.	n.a.
DPR Korea	11.5	7.3	5.6	3.4	-53%
Fiji	17.8	11.2	6.5	4.4	-61%
India	14.1	12.1	8.3	5.3	-56%
Indonesia	13.9	12.3	7.4	4.1	-66%
Iran	14.5	12.7	7.0	2.9	-77%
Lao PDR	14.7	16.0	11.9	6.5	-59%
Malaysia	16.4	12.0	7.0	4.0	-67%
Maldives	15.0	13.3	8.4	3.6	-73%
Mongolia	16.8	17.9	9.5	4.9	-72%
Myanmar	13.6	13.0	7.7	4.3	-67%
Nepal	14.8	11.6	9.0	5.4	-54%
Pakistan	13.8	14.2	11.4	7.2	-49%
Palau	n.a.	n.a.	n.a.	n.a.	n.a.
Philippines	18.0	15.3	10.2	7.1	-53%
Solomon Islands	19.0	16.7	14.4	8.6	-48%
Sri Lanka	10.7	7.3	4.6	3.0	-58%
Thailand	10.5	6.9	3.4	1.9	-73%
Tonga	9.2	10.2	8.3	6.2	-39%
Tuvalu	n.a.	n.a.	n.a.	n.a.	n.a.
Vietnam	9.7	10.4	5.4	2.7	-74%

Figure 1.4 Potential Support Ratios (The Number of Working-Age Persons Per One Older Adult Aged 65 and Older) in 25 Asia Pacific Countries, 2000-2050.

Adapted from *United Nations*, 2012, in Teerawichitchainan and Knodel, 2015, p. 11.

Studies were carried out in Malaysia to identify determinants of elderly's labour force participation. Gwee and Fernandez (2010) found that one of the contributing factors of labour force participation among elderly was high monthly expenses especially among low-income elderly workers. They face this challenge as they were lack of financial literacy education. These individuals should be exposed on how to plan their financial well-being for retirement and this is only possible with sufficient financial literacy exposure (van Rooij, Lusardi & Alessie, 2012).

In most of the developed countries, the governments always emphasise on the financial consequences in terms of increased pension, health and care costs and also the social consequences like needing the extra family care responsibilities and also an increased tax base for the ever lessening working population (Lewis & Tam, 2012). Therefore, there is an urge for individuals to manage their financial well-being especially in planning their financial goals and objectives. Success in financial retirement planning would result in financial freedom after retirement (Tan, Hoe & Hung, 2011).

Lack of knowledge in financial literacy education and financial planning would lead to fallacious retirement decisions among elderly (Clark, 2012). It was found that many Americans were facing dilemma of not having sufficient money to maintain their living upon retirement and this problem was becoming worse over time (Miller, Madland & Weller, 2015). In Malaysia, results of the Manulife Investor Sentiment Index (MISI) survey revealed that even though Malaysians' top priority was having savings for retirement, there was lack of financial planning among them as the current ratio of Malaysians' debt is 68 % which is the highest ratio of all eight markets in Malaysia (Supriya Surendran, 2016).

Furthermore, most of the Malaysian elderly employees continue working upon retirement due to lack of savings and only a small number of them chose to continue working because of their self-achievement and fulfilment (Chan, Laili, Jariah Masud & Tengku Aizan Hamid, 2010). This research was useful but the findings could not be generalised to all the elderly population in Malaysia as the elderly employees' cohort aged 55-75. Thus, there is a room for further investigation on how elderly employees who may have different working accessibility barriers plan their retirement.

In addition, Krishna Moorthy et al., (2012) recommended that there is a relevant need to include knowledge on retirement planning as it determines the actual preparation of both the financial and retirement perspectives. Therefore, this current study is carried out to help fill these gaps and identify key determinants which affect financial retirement planning of elderly individuals in Malaysia.

Theoretical Framework

The theoretical framework is developed based on two theories and four frameworks. The referred theories for this study are the Theory of Life-Cycle Saving and Investing and Theory of Mental Accounting. The referred frameworks are the Factors Affecting Well-being of the Elderly (Yoong, See, & Baronovich, 2012), the National Strategy for Financial Literacy (Financial Literacy and Education Commission, 2011), Model of Financial Literacy and Satisfaction in Malaysia (Azwadi Ali, Mohd S. A. Rahman, & Bakar, 2013) and the Student Perceived Financial Well-being Model: The Final Structure Equation Model (Standardized estimates) (Mohamad Fazli Sabri, Macdonald, Hira, & Jariah Masud, 2010).

Theory of life-cycle saving and investing. This theory was developed by economists to guide individuals to make decisions in saving for retirement (Bodie, Treussard & Willen, 2007). Life-Cycle Saving and Investing theory helps in understanding how individuals make spending and saving decisions based on their life expectancy, income, retirement goals, and intergenerational transfer motives

(Chaffin, 2013). This theory is the prominent theory as there is a need to have some literacy on finance for making proper decisions in financial planning in recent years as individuals are required to take greater responsibilities for their financial matters (Government of Canada, 2005).

This theory was formulated by Franco Modigliani, with Richard Brumberg and Albert Ando in the early 1950s based on the idea on how individuals make wise choices in their financial matters (Baranzini, 2005).The life-cycle hypothesis examines savings and retirement behaviour of elderly (William, 2002). The consumption needs and income vary accordingly to the age group in the life cycle (OECD, 2013). For instance, younger generation may take loans to settle their expenses like buying assets and beginning a family. When they are in middle years, higher incomes may be used to settle their loans and they may also save for retirement. Lastly, upon retirement they may have settled the debts and therefore their income levels and consumption needs may reduce and households may dissave to support their consumption.

Consumption must be continuous despite of income discontinuity and saving is essential to finance consumption during retirement because life-cycle theory assumes that individuals try to maximise the utility which is derived from their whole life-cycle consumption (Baranzini, 2005).The basic life cycle economic model theorizes that individuals need to transfer resources while they are earning as they can use the resources during the periods where they earn less. Lusardi, Michaud and Mitchell (2013) illustrated typical household income profiles over the life cycle. Figure 1.5 illustrates the life cycle net household income profiles by educational attainment.

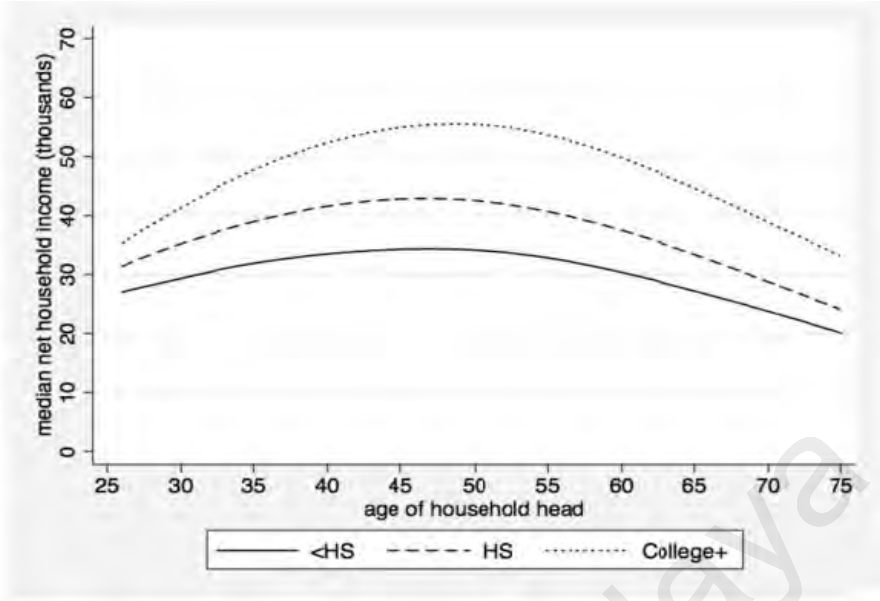

Figure 1.5 Life Cycle Net Household Income Profiles by Educational.

Adapted from *Optimal Financial Knowledge and Wealth Inequality*, by A. Lusardi, P-C. Michaud and O.S. Mitchell, 2013, NBER Working Paper No. 18669, p. 41.

<HS indicates the household incomes of those who have less than a high school diploma. HS indicates the household incomes of those who have completed high school and College+ indicates the household incomes of those who have some college. The household incomes rise at a faster rate for those who have some college and the income decreases slowly for all groups 50 onwards. Lusardi, Michaud and Mitchell (2013) developed an adjusted version of life cycle model by adding financial literacy as an endogenous variable and they found that investments in financial literacy can influence individuals' ability to save and invest for retirement well-being. Financial literacy strongly affects household wealth accumulation. (Behrman, Mitchell, Soo & Bravo, 2010).

In financial planning, individuals make two decisions; saving decisions and investment decisions (Bovenberg, Koijen, Nijman & Teulings, 2007). One of the strengths of this theory is that it gives utmost importance to saving and investing decisions. (Bodie, Treussard & Willen, 2007). Saving decisions are made to set the pension premium and the pension benefits to smooth consumption over time. (Bovenberg, Koijen, Nijman & Teulings, 2007, p.348). Individuals also make investment decisions to plan their financial. For instance, they decide on how to invest in variety of financial assets so that in future they are prepared to face any contingencies especially when their income decreases upon retirement. The Life Cycle Hypothesis (LCH) emphasises on utility maximising throughout one's lifetime. Therefore, it is assumed that individuals who are working would save money while they earn to be spent upon retirement (Gythfeldt, 2008).

Individuals should start saving during their younger age in order to compensate for income-losses at old-age (Bucher-Koenan, 2009). One of the weaknesses of life-cycle and saving is that not all the individuals have broad financial literacy to make and execute complex plan to save sufficient money during their working period as studies show that individuals' saving manners are very different from the predictions of life-cycle savings theory (Bucher-Koenan, 2011; Lusardi & Mitchell, 2013). For instance, current studies found that the rates of poverty in OECD countries were higher for older people (aged 65 or more) and in 27 out of 30 OECD countries, older women were at greater risk (OECD, 2011). These findings were contradictory with the Life Cycle Hypothesis. Older Americans, specifically women, minorities and those who were least educated were lack of financial literacy (Lusardi & Mitchell, 2011a).

Despite of challenges to the theory, the life-cycle hypothesis remains as an essential part of economists' thinking. This theory explains many issues like private and public provision of social security, the effects of the stock market on the economy, the effects of demographic change on national saving, the role of saving in economic growth, and the determinants of national wealth (Deaton, 2005). This theory explains individuals' saving patterns but did not suggest on how the saving patterns could be modified to increase the amount of savings for retirement for working individuals (Wills & Ross, 2002). Therefore, this theory is used as a base in this study in order to analyse the financial planning for retirement for urban elderly individuals.

Theory of mental accounting. This theory is used in this study as it involves behaviouristic of individuals to plan their expenditure and save money for their future. This theory was developed by Thaler in year 1985 and he defined it as "The set of cognitive operations used by individuals and households to organise, evaluate, and keep track of financial activities" (Thaler, 1999, p.183). One of the strengths of this theory of mental accounting is being aware of financial management. Individuals do code and categorize all their expenditures in order to mentally divide the money that they have to make plans, keep track of their expenditure and avoid unnecessary overspending on products that are not useful (Cheema & Soman, 2006; Thaler, 1999). He added on that there are three essential components of mental accounting; how outcomes are perceived and experienced, and how decisions are made and subsequently evaluated.

Mental accounts are kept by most individuals especially those who manage monthly expenditure. Mental accounts guide individuals to keep track of their financial activities and control their consumption (Salas, 2014). Individuals with financial literacy will be aware of the basic monthly expenditure that they are committed to and have in their mental accounts is like electricity, water, telephone bills, credit cards, loans, rent and others. When individuals are committed to their expenditures, they can efficiently increase their savings (Kast, Meier & Pomeranz, 2012).

According to Thaler (1999, p.185) there are three features of mental accounting theory:

1. The value function is defined over gains and losses relative to some reference point. The focus on changes, rather than wealth levels as in expected utility theory, reflects the piecemeal nature of mental accounting. Transactions are often evaluated one at a time, rather than in conjunction with everything else.
2. Both the gain and loss functions display diminishing sensitivity. That is, the gain function is concave and the loss function is convex. This feature reflects the basic psychophysical principle (the Weber- Fechner law) that the difference between $10 and $20 seems bigger than the difference between $1000 and $1010, irrespective of the sign.
3. Loss aversion. Losing $100 hurts more than gaining $100 yields pleasure: $v(x) < -v(-x)$. The influence of loss aversion on mental accounting is enormous, as will become evident very quickly.

One of the weaknesses of mental budgeting is that individuals tend to under consume for certain matter like entertainment and clothing (Heath & Soll, 1996). In addition, individuals with an unstable household income would impose limits to their mental accounts as they face more difficulties in saving money compared to wealthier individuals (Salas, 2014).

Factors affecting well-being of the elderly. In addition to the previous theory, one of the frameworks of this study includes the factors affecting the well-being of the elderly developed by Yoong et al., (2012) upon conducting a study in Malaysia particularly in Klang Valley to find out how the financial learning for retirees affect their financial planning ground work. Four main problems were identified by Yoong et al., (2012).

First, the pension payments for public-sector employees were low (Goldhaber, Grout & Holden, 2015; Husna Sulaiman & Jariah Masud, 2012) and the EPF savings for private-sector employees were inadequate (Holzmann, 2014).Second problem was the gap between increasing Malaysian living expenditures and living standards. Third problem was the costs of medical expenses were increasing (Holsopple, 2014; Rosenthal, 2014). Fourth problem was the addition of family system and also the emergence of nuclear family units.

This study is considered essential because developing a model of financial planning for retirement requires us to understand the factors that contribute towards retirees' financial planning for retirement. The theoretical framework in Figure 1.6 consists of the chosen factors that influence the well-being of elderly individuals in Malaysia. The findings showed that financial learning made a significant contribution to financial literacy level. Besides, financial literacy made a significant contribution to economic well-being level. Lastly, financial literacy mediated the relationship between financial learning and economic well-being.

Other studies have also found that financial education which is also known as financial learning being positively related to retirement planning (Yoong, See, & Baronovich, 2012; Ekerdt & Hackney, 2002). This framework was used in this study because it consists of the main components that contribute towards the well-being of elderly.

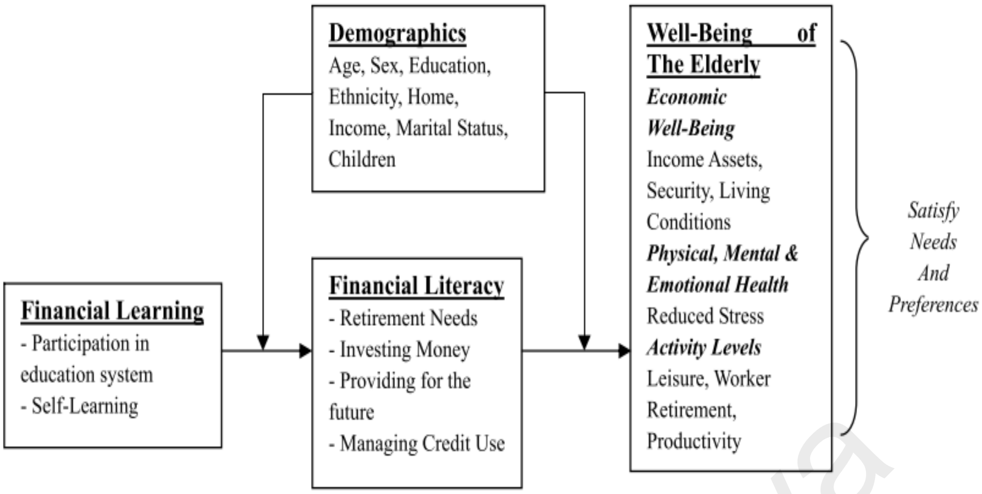

Figure 1.6 Factors Affecting Well-Being of the Elderly.

Adapted from *Financial Literacy Key to Retirement Planning in Malaysia*, by F.J. Yoong , B.L. See and D.L. Baronovich, 2012, Journal of Management and Sustainability , p. 86.

The above framework shows the relationships among the variables. For instance, the demographic characteristic like personal income of a respondent is significantly related to subjective perception scale, behavioural assessment scale, perceived financial well-being scale, satisfaction with financial situation scale, and the amount of their retirement funds and personal income. The personal income positively affects the personal financial well-being.

Financial education contributes towards financial literacy. Lack of financial education leads individuals to make poor financial decision (Hasting, Madrian & Skimmyhorn, 2012). The participation of a respondent in education system and self-learning help him or her to enhance his financial literacy. He or she can have ideas on the essential retirement needs. Besides, he or she would also be able to invest money through proper channels for their future after retirement and manage their credit use as well. Therefore, it is important for an individual to be involved in financial education and be financially literate as these contribute to the overall financial well-being of the elderly especially upon retirement.

National strategy for financial literacy. The theoretical framework for this study is also based on the framework of National Strategy for Financial Literacy set by the Financial Literacy and Education Commission (FLEC) in the United States. This framework was designed as an aid to help individuals and families to make wise financial decisions. This framework consists of financial literacy strategy. This framework emphasised on two important matters; the importance of enhancing financial literacy and wise financial decision making and also the education efforts which were highly required to achieve the objectives. The success of this framework to increase financial literacy and to make wise decisions on financial matters can and should be achieved by the combined cooperation from non-profit, government and private sectors.

Financial education was emphasised in this framework as it was so crucial in exposing to the individuals and families on pertinent financial information in order to ensure that they are intelligent enough to make financial decisions. Financial education should be intensified at school levels as it aids in retirement planning and sustaining through retirement without any financial hassles (Suhaimi Ali, 2013).

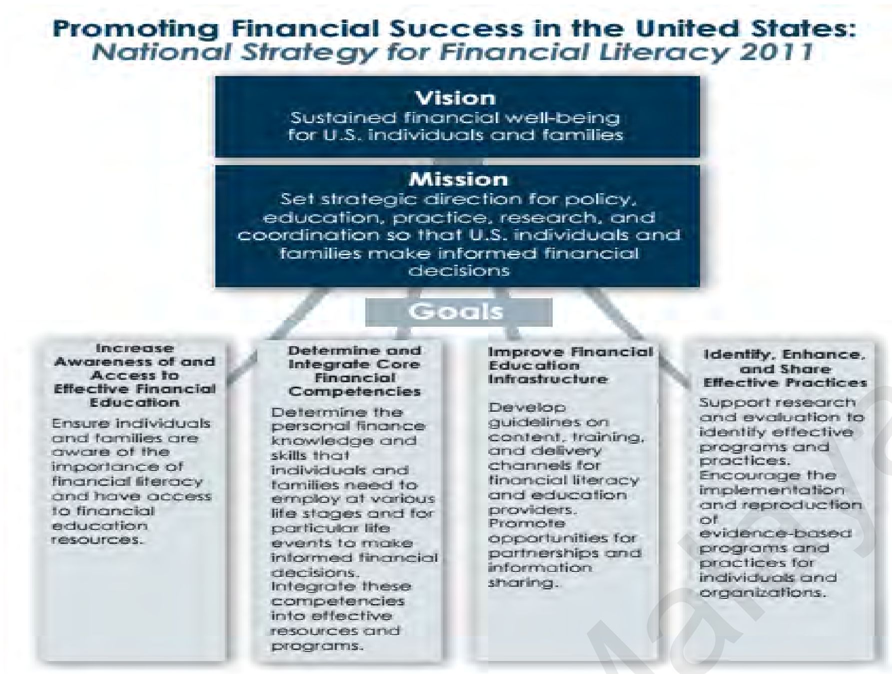

Figure 1.7 Promoting Financial Success in the United States: National Strategy for Financial Literacy 2011.

Adapted from *National Strategy for Financial Literacy 2011*, by Financial Literacy and Education Commission, 2011, p. 6.

In the framework shown in Figure 1.7, four crucial goals for financial literacy were included. Firstly, it was important to expose to everyone on the awareness of and access to effective financial education resources and the resources came from schools, employers and financial education providers. As mentioned earlier, financial education is a compulsory subject for everyone and with sufficient and effective resources; individuals would be able to make wise financial decisions especially for retirement. Hastings et al., (2012) also agreed and stated that the knowledge and skills to manage one’s financial resources efficiently was important for lifetime financial security.

Secondly, it was also important to define and incorporate essential financial skills. Every individual regardless of the age group should be equipped with pertinent financial knowledge and skills in order for them to make wise financial decisions (Ali, McRae, & Ramsay, 2014). Limited financial knowledge and skills would result in poor an unwise financial decisions and this would affect the retirement planning.

Thirdly, the goal was to ensure that financial education infrastructure is enhanced. The financial education for every individual should be provided equally and there should not be any biasness in this process and definitely the delivery should be impactful. Experts who are responsible in exposing financial education should follow financial literacy and education guidelines which are recommended for them. Besides that, they should also be able to foster corporations and other collaborative opportunities to reinforce the efficiency of financial education efforts.

Lastly, the fourth goal was to identify, enhance and share effective practices. Many research and evaluation which are carried out to find out the effective programmes and practices to ensure that financial education is effective should be supported. Evidence- based programmes and practices for individuals which are closely related to financial education should be easily implemented and reproduced without any disagreement. Overall, these goals were very crucial in achieving the vision and mission of this framework. These goals are beneficial for every individual as it is a strategic way to help others to sustain the financial well-being.

Model of financial literacy and satisfaction in Malaysia. In order to ensure the effectiveness of this study, another framework was included which consist of contributing factors of the level of financial literacy among chosen Malaysian public and the relationship with financial satisfaction (Azwadi Ali, Mohd S.A. Rahman, & Bakar, 2013).This framework was developed upon conducting a pilot study among 199 respondents who were working and interested in managing financial matters. Figure 1.8 indicates the model.

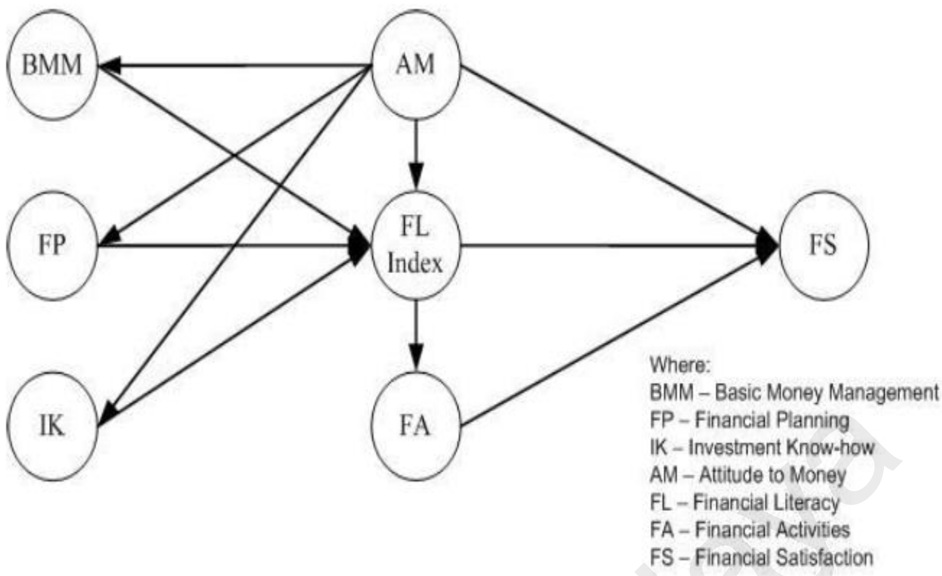

Figure 1.8 Financial Literacy and Satisfaction Model.

Adapted from *Financial Literacy and Satisfaction in Malaysia: A Pilot Study*, by Azwadi Ali, Mohd S.A. Rahman and Alif Bakar , 2013 , p. 320.

This model assumed that individuals' financial satisfaction was anticipated based from the financial literacy. This model consisted of five antecedents of the financial literacy; basic money management, financial planning, investment know-how, attitude to money and financial activities. These antecedents were considered very important in improving their financial satisfaction. Taft, Hosein, and Mehrizi (2013) carried out a study to measure the relation between financial literacy, financial wellbeing and financial concerns.

They used questionnaire and distributed it using random sampling among the respondents. The data was analysed using correlation test, Independent two-sample test based on the T distribution and regression. The findings indicated that age and education were positively correlated with financial literacy and financial wellbeing. The individuals who were more financially literate are the ones who were married and men. In addition, the result also showed that a person with higher financial literacy can be great in dealing with financial security and less financial concerns.

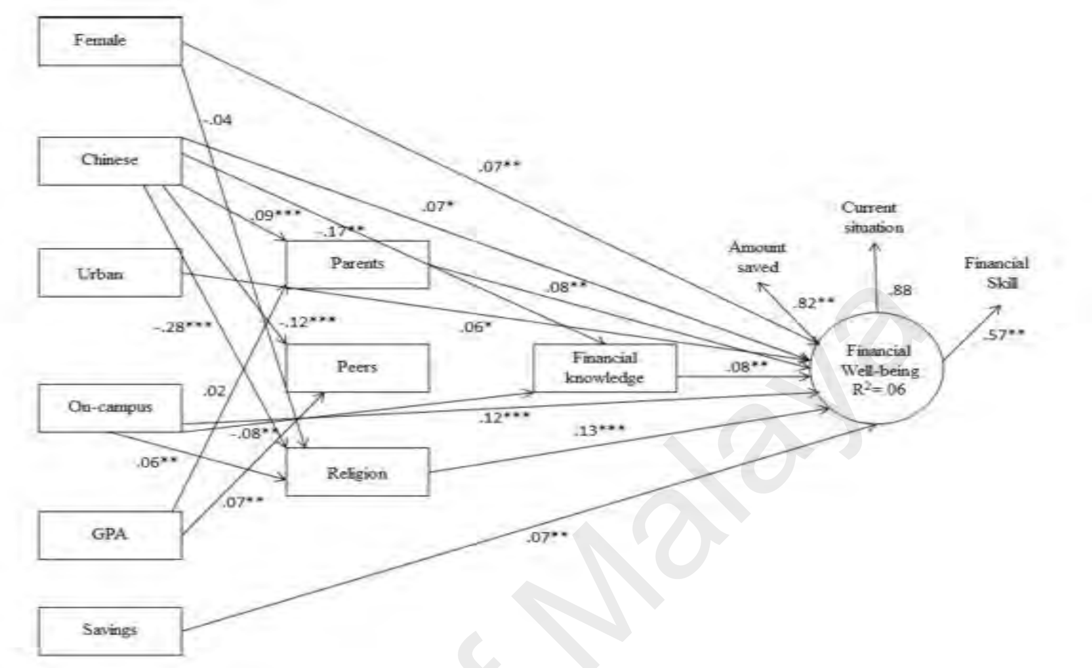

Figure 1.9 The Student Perceived Financial Well-Being Model: The Final Structure Equation Model (Standardized Estimates).

Adapted from *Pathways to Financial Success: Determinants Of Financial Literacy and Financial Well-Being Among Young Adults*, by Mohamad Fazli Sabri, M. Macdonald, T.K. Hira, and Jariah Masud, 2013 , p. 94.

The student perceived financial well-being model. The other framework referred in this study was the student perceived financial well-being model. Figure 1.9 indicates the model. Four researchers carried out this study to figure out the determinants (personal and family background, academic ability, and childhood consumer experiences) of perceived financial well-being among college students in Malaysia. This model was a result of a data analysis from a survey consists of 2519 students and it was carried out during 2005-2006 from six public universities and five private universities in Malaysia.

The model which was developed using Structural Equation Modeling (SEM) showed the direct effects between personal and family background variables (gender, ethnicity, type of college, student's residence, and parent's education) and perceived financial well-being. In addition, academic ability variables (grade point average [GPA] and class rank), and childhood consumer variables (opened a savings account, received an allowance, and discussed finances with parents) were predicted to have directs effects on perceived financial well-being. Financial socialisation and financial knowledge were also expected to have direct effects on financial well-being. The model also clarified the indirect effects from these variables.

Overall, religion was insignificant predictor of financial socialisation for male or female students, and parents were insignificant too in the financial socialisation of students with lower or higher academic achievement. Savings were significant in the perceived financial well-being. Ethnicity and students' residence were significant in predicting the influence of religion on financial socialisation. Chinese students had the lowest mean scores compared to Malay, Indian, and other ethnic groups.

Those students who do not discuss finances with their parents had lower financial knowledge scores. Parents were a more significant source of financial information among Chinese students compared to Malays. In predicting the influence of friends on financial socialisation, ethnicity and GPA were significant. Chinese ethnicity indicated that they were less likely to learn financial knowledge from friends compared to Malay respondents as Chinese students learn financial knowledge from their parents. Those students who stayed in campus had lesser knowledge about personal finance. Students with higher GPAs would have gained financial knowledge from friends than students with lower GPAs.

The paths which were significant in predicting perceived financial well- being were financial knowledge, parents, religion, savings, gender, ethnicity, place of origin, and students' residence.

Conceptual Framework

The conceptual framework of this study is designed upon carrying out a thorough study in the field of financial planning and it is done through some adaptations from two theories and four theoretical models as stated in the previous section of this thesis. In order to develop a conceptual framework for financial literacy education and retirement planning for this study, theory of life-cycle saving and investing and theory of mental accounting along with factors affecting well-being of the elderly framework by Yoong et al., (2012), promoting financial success in the United States: National strategy for financial literacy framework by Financial Literacy and Education Comission (2011), financial literacy and satisfaction in Malaysia model by Azwadi Ali et al. (2013) and the student perceived financial well-being model: The final structure equation model (standardized estimates) by Mohamad Fazli Sabri et al. (2010) were integrated.

The main reason for integrating these theories and frameworks are because of the important elements needed for financial planning were found in the studies but the relationships among all the elements were done separately. Therefore, by combining all the elements and figuring out the relationships the end product would be beneficial for individuals who would want to plan their finance for retirement in future. Figure 1.10 shows the conceptual framework for this study.

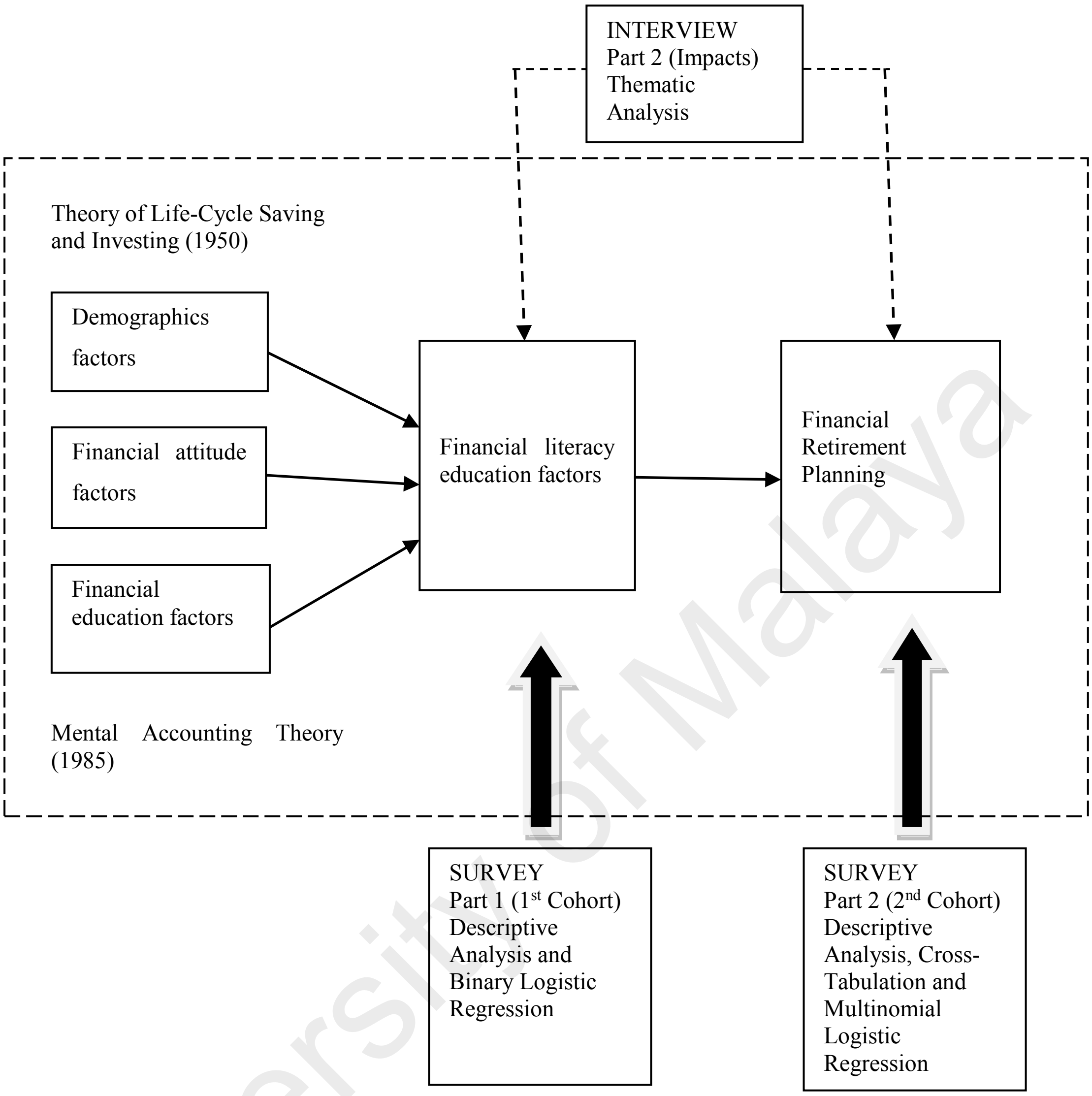

Figure 1.10 Conceptual framework

In the first part of the data analysis, prior to identifying the relationships between financial retirement planning and demographic, financial attitude, financial education and financial literacy factors, there is a need to identify the relationships between demographic, financial attitude, financial education factors and financial literacy education using descriptive analysis and binary logistic regression. This part of analysis is crucial as it will find out the importance of having financial literacy education before retirement for elderly individuals.

Then, cross-tabulations and multinomial logistic regression are used to analyse the significance between financial retirement planning and demographic, financial attitude, financial education and financial literacy factors. Through this analysis, the overall effects of all the four important variables can be studied.

The second part of the data analysis is important as it provides opportunity for sharing great ideas and opinions. Semi-structured interviews could reveal the impacts of demographic, financial attitude, financial education and financial literacy factors on financial retirement planning of elderly individuals in Malaysia. This could provide useful discoveries on financial retirement planning for the elderly individuals in Malaysia as many are facing numerous challenges in dealing with their finance upon retirement.

Purpose of the Study

The purpose of this study is to identify the key determinants of financial literacy education affecting financial retirement planning of the urban elderly in Malaysia. This study is conducted based on two major parts. The first of part of this study provides in-depth information on the key determinants of financial literacy education of elderly individuals in Malaysia and the significant relationships between these determinants. Upon analysing the financial literacy education and the other pertinent determinants, this study provides detailed information on the key determinants of financial planning for retirement and the relationships between demographic, financial attitude, financial education and financial literacy factors on financial retirement planning of elderly individuals in Malaysia.

The second part of this study is crucial as it provides detailed and rich information on the impact of demographic, financial attitude, financial education and financial literacy factors on financial retirement planning of elderly individuals in Malaysia.

Objectives of the Study

The objectives of this study have been divided into two parts, namely:

Part 1: Survey (1st cohort)

Objective 1

To identify the key determinants of financial literacy of elderly individuals in Malaysia.

Part 1: Survey (2nd cohort)

Objective 2

To identify significant relationship between demographic factors and financial planning factors.

Objective 3

To identify the significant determinants that influence financial retirement planning of elderly individuals in Malaysia.

Part 2: Interview

Objective 4

To highlight the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia.

Research Questions

This study is carried out in order to seek answers for the following research questions:

Part 1: Survey (1st Cohort)

Research question 1

What are the determinants of financial literacy of elderly individuals in Malaysia?

Part 1: Survey (2nd Cohort)

Research question 2

Are there any significant relationships between demographic factors and financial planning factors ?

Research question 3

What are the determinants (demographic, financial literacy, financial attitude, financial education) that significantly determine the financial retirement planning?

Part 2: Interview

Research question 4

What are the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia?

Hypothesis

The following hypotheses are also investigated:

Part1: Survey (1st cohort)

H_1: Gender is an important factor in determining financial literacy.

H_2: Ethnicity is an important factor in determining financial literacy.

H_3: Marital status is an important factor in determining financial literacy.

H_4: Education level is an important factor in determining financial literacy.

<u>Part 1: Survey (2nd cohort)</u>

H_5: There is a significant relationship between age and:

1) Asset_Owership
2) Comfortable Retirement
3) Duration_SavingtoLast
4) Estimation_RtrmntSaving
5) Financial Planning Ways
6) Five Years Financial Situation
7) Monitor_Spending

H_6: There is a significant relationship between gender and:

1) Asset_Owership
2) Comfortable Retirement
3) Duration_SavingtoLast
4) Estimation_RtrmntSaving
5) Financial Planning Ways
6) Five Years Financial Situation
7) Monitor_Spending

H_7: There is a significant relationship between ethnicity and:

1) Asset_Owership
2) Comfortable Retirement
3) Duration_SavingtoLast
4) Estimation_RtrmntSaving
5) Financial Planning Ways
6) Five Years Financial Situation

7) Monitor_Spending

H_8: There is a significant relationship between education level and:

1) Asset_Owership
2) Comfortable Retirement
3) Duration_SavingtoLast
4) Estimation_RtrmntSaving
5) Financial Planning Ways
6) Five Years Financial Situation
7) Monitor_Spending

H_9: At least one determinant (Demographic, financial literacy, financial attitude and financial education factors) is significantly associated with elderly individuals in financial planning for retirement.

Significance of the Study

This study is conducted for several crucial reasons. This study identifies how demographic characteristics, financial attitudes and financial education and financial literacy may contribute to impact elderly individuals in financial planning for retirement context. These components are considered crucial for elderly to retire with financial freedom. In many countries including Malaysia, elderly are facing financial issues few years upon retirement.

Many are affected with the culture of 'depending' on the children financially and if the children fail to provide sufficient money to the elderly parents, then parents might face disappointments. Recent studies indicated that many adult children are part of "sandwich-generation"; the children give importance for their parents and also for their own children (Personal Money, 2010). Many adults marry late and have children later in life and these children need financial support through their higher levels of education. The conflicts begin here whereby the sandwich generation members were responsible to support their parents financially; their utmost importance will be their own children and their children's education financial matters (Ganang, et al., 1998). Findings proved that those with more number of children were less likely to provide their own parents with financial support (Concepcion & Perez, 2006; Grundy & Henretta, 2006). Therefore, it is always important for the elderly to equip themselves with sufficient knowledge on financial literacy education so that they can plan their retirement well.

The findings in this study can be helpful for other researchers to further investigate on how to help out the elderly individuals to retire with financial freedom. Policy makers can make an effort to look into the findings and if the findings are relevant to the elderly individuals in Malaysia, policy makers can develop relevant and helpful financial policies for elderly. Many elderly need to know the importance of retirement planning and they need to equip themselves with financial literacy education in order to make sound retirement decisions so that they can be financially independent even upon retirement and they can also have sufficient amount of bank balance. It will be useful for the especially when it comes to dealing with basic expenses like food, shelter, medical and etcetera.

In Malaysia, Bantuan Orang Tua (BOT) is given to elderly above 60 years old in the form of RM300 monthly. Those who get this financial aid are the ones without any source of income or do not have families or poor families who cannot afford (Perkhidmatan Warga Emas, 2013). Despite this aid, many elderly from poor family background in Malaysia are facing financial difficulty especially several years down the road. Therefore, the exploration of financial literacy determinants is important because everyone should be exposed to the proper ways of financial planning so that they can plan for their retirement well.

Rationale of the Study

This study is carried out for a number of important reasons for the improvement of financial retirement planning among elderly individuals in Malaysia. Seemingly, it aids in enhancing the effectiveness of elderly individuals planning for their retirement by accumulating sufficient savings and having investments.

This study consists of crucial elements that should be practiced by elderly individuals to add on the values of their financial planning for retirement. Thus, the policy makers should include the findings of this study in the retirement policy. This part of the policy can be very useful for employees to plan their financial matter before they retire.

Besides that, participation from elderly individuals in sharing their ideas and opinions are crucial in supporting the financial planning for retirement. They are encouraged to contribute their ideas and opinions to increase the quality of financial planning before retirement. It is expected that this study could reduce the issues of elderly individuals having insufficient amount of money and facing financial constraints upon retirement.

In addition, both local and international readers could apply the findings of this study in real life. This study reflects on the current retirement issues scenario in Malaysia. Besides, it also considers the fewer amounts of government policies for improving the overall quality of financial planning for retirement. It also aids the government's policy in ensuring employees setting a minimum amount of their salary into the Employee Provident Fund (EPF) so that it will be useful for them upon retirement.

Definitions of Terms

This section is essential as it consists of definitions for the essential key terms used in this study. By understanding the explanations of the key terms, the understanding of the context of this study would be easier.

Retirement. Retirement is another phase of life where an individual leaves his or her paid job and also the active working life. Mo (2013) defined retirement as the act of leaving the main employer where an individual worked with for a substantial amount of time. Those who are retired from their work are called as retirees. Upon retirement individuals can decide whether to continue working on part-time basis or contract basis or even stay at home and spend more quality time with family. Retirement is also a phase where an individual does not need to pay attention to the demands of his or her paid job as he or she will be free from being ordered to do any tasks for his or her employer. The current minimum retirement age for Malaysians is at the age of 60.

Retirement planning. Planning is all about making a specific plan for specific matter. Planning is essential as it would be beneficial later on. Among all the other plans, retirement planning is one of the most important one. Planning for retirement is a challenging task as this planning takes place for an uncertain period of time (Hopkins, 2014). Individuals need to plan their retirement well by ensuring that their savings will last for 20 years and more despite of current economic situations. Retirement planning should be pertinent with one's retirement goals as everyone needs a source of income to fulfil those goals upon retirement. In a survey, the finding showed that 92 per cent of elderly who are confident with their retirement have developed a written retirement plan (Franklin Templeton Investments, 2015).

Financial literacy. The concepts of financial literacy are difficult to define because of the content and variety of opinions. However, most people would define financial literacy as the “ability to read, analyse, manage and communicate about the personal financial conditions that affect material well- being" (Zait & Bertea, 2014). Financial literacy is all about understanding how money can be managed in this world in different times in different places and for different purposes.

Basic financial literacy is needed by everyone in order to survive in the era of globalization with higher level of economic crisis. Financial literacy is all about having the pertinent knowledge, wise skills and confidence which are needed to make sound financial decisions (Financial Consumer Agency of Canada, 2015). An individual should have knowledge on financial matters and has the ability to apply his or her financial knowledge in daily life and with confidence of making proper financial decisions in order to manage money sensibly.

Financial planning. Common scenarios like elderly lack of budget upon retirement and insufficient of savings for older age happen due to lack of financial planning. It is so crucial for everybody in order to plan their finance properly. Sutherland (2012) defined financial planning as “taking the money you have earned from the work you do and making sure you put it to good use in a way that reflects your desires and values” (p.1). Proper financial matters decisions should be made as to smoothen the financial planning. Financial planning involves goal setting. Financial planning is not a difficult task.

One needs to learn on proper ways to use the money that he or she has. For instance, in order to keep track of the actual spending, one can collect detailed information about the daily, weekly, monthly and annual expenses. By doing this, he or she will not overspend on certain things. Financial plans can be done by own; however, certain people tend to seek for professionals' help in order to develop a financial plan for their future especially upon retirement.

Financial literacy education. Financial literacy education is also known as financial learning. Financial literacy education is not only essential for entrepreneurs but it is also equally essential for everyone who would want to live a good and comfortable living. Financial literacy education aids individuals in balancing their budgets, saving funds for children's education, buying necessary things, and most importantly in saving for future. Financial literacy education is essential in ensuring individuals' financial stability and their financial well-being (Russia's G20 Presidency & the OECD, 2013). Atkinson, Messy, Rabinovich, and Yoong (2015) reviewed previous studies and literature and they found that financial education increases the levels of financial literacy and therefore it aids in enhancing the long-term savings and investments among individuals.

Demographic characteristics. Demography literally means description of people (United Nations Statistics Division, 2014). Some demographic characteristics that are often studied are age, gender, living arrangement, education, race, marital status, income level, and health status. The interest of individuals in certain matters varies according to their demographic characteristics. For instance, a survey on financial literacy and its demographic factors in Indonesia revealed that the higher level of education of an individual, the higher the individual's financial literacy index (Homan, 2015). Demographic characteristics are also analysed according to group instead of individual. A study on the relationship between financial literacy and retirement planning among Swedish adults showed that different demographic groups have different financial literacy levels. In particular, the level of financial literacy is lower among women, elderly people, individuals with low incomes and low levels of education (Almenberg & Save-Soderberg, 2011).

Financial attitudes. In general, an individual's attitude reflects his lifestyle. Attitude is a measure of an individual's state of mind, individual's opinions and judgements about the world that you live in (Pankow, 2012). Financial attitudes in general refers to factors which are closely related to specific attitudes and behaviours, like life stage, gender, household composition, retirement and income (Australian Financial Attitudes and Behaviour Tracker, 2014). In the survey 43 per cent of Australians had a positive attitude where they agreed that dealing with money is interesting. A financial literacy study in Malaysia found that individuals with higher level of financial attitude have higher level of financial literacy (Md Hafizi Ahsan, 2013). Those who have positive attitude like being thrifty and able to plan for a long long-term can prevent themselves from facing financial problems (Madern & van der Schors, 2012).

Financial courses. Lack of knowledge in financial literacy may results in poor financial planning. Financial courses foster financial education among individuals. The courses are also useful for employees who want to improve their ability to manage short term and long –term financial needs (Cordray, 2014).Thus, policy makers emphasise on financial courses like credit counselling, homeownership classes, and retirement seminars to aid individuals in enhancing their financial knowledge (Meier & Sprenger, 2013). In addition, Manturuk, Dorrance and Riley (2012) highlighted that in order to help the low and moderate income families to save money for their retirement, a home, children's education or for any emergency, suitable savings courses play important roles.

Summary

Overall, chapter one provides an overview of the thesis. This chapter includes the background of study, statement of the problem, theoretical frameworks, conceptual framework, relevant hypothesis, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, and definitions of terms. The subsequent Chapter 2 (Literature Review) includes a comprehensive overview of all the studies in the past which relate closely to this field of this study.

CHAPTER 2

LITERATURE REVIEW

Overview

The second chapter is considered as an important chapter as it provides in-depth details about all the studies which are done in the past. This chapter assists readers to familiarise themselves with most of the past studies that have been carried out by researchers in the field of retirement planning. Firstly, the past studies about retirement and retirement age policy are explained. Then, it is followed by pension funds, retirement planning and financial literacy. Interestingly, there is also literature related to the decision to work or to retire. The studies on factors which are closely related to retirement planning, financial attitudes, financial education courses were explained undoubtedly.

Retirement

Retirement is a period where an individual leaves the labour force after so many years of being in a committed job (Society of Actuaries Key Findings: Working in Retirement, 2012). Retirees are those who have retired from their fulltime work. They do not need to clock in and clock out and work according to office hours. Throughout the 40 years of working, everyone lives by the clock and the body needs to follow a systematic routine. Life after retirement is totally a new one. It is a completely changed life. Retirement is all about starting a new phase of life (Clark, 1960).

The process which an individual uses to make retirement decisions may be influenced by a rational allocation of money, time, and effort, as suggested by a utility-maximising Household Production approach (Brothers, 2013). One widely held view emphasises factors forcing or "pushing" employees out of their jobs. This distinction is obviously somewhat arbitrary since for example the onset of poor health can "push" an employee out of his job but can also make leisure more attractive thus "pulling" that employee into retirement. Despite of this caveat, it is useful to classify evidence on these two hypotheses for descriptive purposes. Evidence on the "push" hypothesis: This theory holds that people truly wish to remain employed at older ages, but they are forced to leave from their jobs because of factors like declined productivity, poor health, mandatory retirement and age discrimination and structural shifts in labour demand (Mitchell, 1992, p.5).

OECD countries are likely to see modest—but not catastrophic—declines in the rate of economic growth. However, behavioural responses (including greater female labour-force participation) and policy reforms (including an increase in the legal age of retirement) can lessen the economic consequences of an older population Bloom, Canning & Fink, 2010). An in-depth study on retirement indicated that in half of OECD countries, half of men give reasons like unemployment, sickness or disability beliefs and on the other hand, women decide to quit their jobs because of need to take care of family members (OECD, 2011).

However, the age of retirement in every country differs and it is shown in Table 2.1. OECD consists of 34 countries and 70 non-member economies. The governments of these countries cooperate to promote the growth of economy, wealth, and endure the growth.

Table 2.1
Pension system in 2012

Country	Men	Women
Argentina	65	60
Australia	65	65
Austria	65	60
Belgium	65	65
Brazil	65	60
Canada	65	65
Chile	65	60
China	60	55
Czech Republic	62	61
Denmark	65	65
Estonia	63	63
Finland	65	65
France	60	60
Germany	65	65
Greece	67	67
Hungary	62	62
Iceland	67	67
India	58	58
Indonesia	55	55
Ireland	66	66
Israel	67	62
Italy	66	66
Japan	65	65
Korea	60	60
Luxembourg	57	57
Mexico	65	65
Netherlands	65	65
New Zealand	65	65
Norway	67	67
Poland	65	60
Portugal	65	65
Russian federation	60	55
Saudi Arabia	60	55
Slovak Republic	62	62
Slovenia	65	65
South Africa	60	60
Spain	67	67
Sweden	65	65
Switzerland	65	64
Turkey	66	58
United Kingdom	65	60
United States	66	66

Note. Adapted from *Pensions at a glance 2013: OECD and G20 indicators*, by OECD, 2013, p.208-362. Copyright 2013 by OECD.

In Malaysia, the minimal retirement age as decided by the government is 60 years old and it was enforced on 1 July 2013 (Ministry of Human Resources, 2013). Figure 2.1 and 2.2 indicate the changes of retirement age for Malaysian men and women since year 2010 until year 2014. However, the retirement age for employees can be above 60 years as the retirement age can be decided by the employers. Premature retirement is not advisable in Malaysia and those who commit the offense without a proper justification will be responsible to a fine not exceeding ten thousand ringgit (Act 753: Minimum retirement age act 2012).

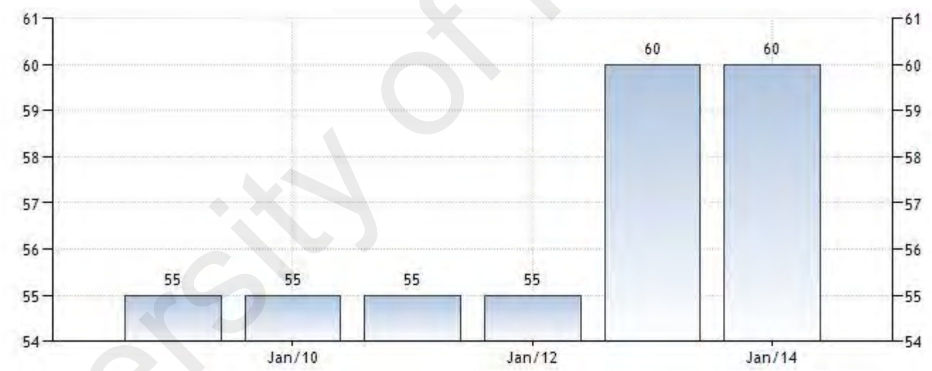

Figure 2.1 Malaysian retirement age - men.

Adapted from *Malaysian Retirement Age - Men*, by Trading Economics, 2015. Copyright 2016 by Trading Economics.

Figure 2.2 Malaysian retirement age - women.

Adapted from *Malaysian Retirement Age - Women*, by Trading Economics, 2015. Copyright 2016 by Trading Economics.

There are several key elements of 'retirement readiness' (Collinson, 2013). The most important element is before retire a person should have a clear vision of retirement and start planning according to it. The approaches include knowing the needs of saving, potential threats, and also the backup plan if he is being forced to retire earlier. Next, one should also be smart enough to have solid retirement incomes which include savings and investments and be aware of the benefits of pension from the government. Besides that, he should equip himself with sufficient knowledge before retirement to make wise decisions about retirement investments, government benefits, and also healthcare. Lastly, the person should have an understanding family. He or she can actually have an open discussion about finance matters and agreement on any expectations of support.

According to a report done by Hongkong and Shangai Banking Corporation (HSBC, 2013), there are five essential steps for a well planned retirement. Firstly, one should be aware of their retirement needs while working itself (Miller, Madland, & Weller, 2015). Individuals need to be aware on how much they need in order to sustain throughout their retirement period. Secondly, the importance should be given to the savings in advance (U.S. Department of Labor, 2010). Sufficient savings is needed as an aid of support for elderly upon retirement. In Malaysia, it was found that approximately half of the retirees were supporting their children financially (HSBC, 2013b). One of the main cause for Malaysians having higher debts is due to children's education (Supriya Surendran, 2016). Children in Malaysia are depending on their parents even after they retire and for this reason those parents who have less savings and financial aids continue working to support their children.

Thirdly, in retirement planning, elderly should be aware of how their savings will be affected by major life events. Elderly individuals who have little savings or investments upon retirement will face problems when they come across unexpected expenditure (Day, 2014). Health related expenses are one of them. Everyone should set a huge amount for medical expenses as it raises due to the economy growth. Calmus (2013) explained that in the United States Long-term Care (LTC) is in crisis as the medical advances results in higher costs and very few elderly are prepared to pay for their LTC as they do not sufficient savings or insurance for themselves.

Fourthly, those who want to retire with less financial burden should be able to plan for the future before they retire. Individuals with lower income need financial planning for retirement more than individuals with higher income (Boisclair, Lusardi & Michaud, 2014). Planning is so crucial in this new century because earlier generations of employees rely fully on their pension, however now many employees will need to depend on their own savings as well. Therefore, by planning one can solve their financial issues. Financial planning guides individuals to review their financial goals and take necessary steps to update or fulfill the goals (Fontinelle, 2017).

Lastly, in order to improve their financial well-being for the later life, elderly is encouraged to seek advice from financial professionals in order to help them out by advising pertinent matters that elderly should do before they retire (Hastings, Madrian & Skimmyhorn, 2012). For instance, professionals may suggest to invest in any financial schemes like public mutual for the elderly to invest in order for them to get the return several years down the retirement. Despite of all the importance of retirement planning, Castro-gonzales (2014) found that less than 50 per cent among 300 employees said that they have made an attempt to plan for their retirement and less than 40 percent among them have achieved their goals and out of them only 14 per cent boldly said that they will have sufficient resources at retirement.

In short, there is a need to expose the financial literacy education and spread the awareness on retirement planning among Malaysians. They ought to have a clear vision of financial literacy education and retirement and plan their retirement accordingly. In the current unpredictable situation of economic, Malaysians need to have solid retirement incomes rather than depending on their pension or EPF. The awareness of planning for the retirement should start while working itself.

Retirement Age Policy

Flexible and adjustable retirement policies in the 21st century aid individuals in facing the changing social demographics and human capital shortages in certain occupations. Many are finding ways to balance up their dreams and their financial security even when they are nearing the retirement age (Society of Actuaries, 2012). The initial retirement age policy cannot be used as it is not relevant for today's living. The expending of retirement age has been practiced by many elderly employees in order to keep abreast with the progress of demographic changes and aging. In the United States, researchers contended that working upon retirement can lead to a better quality of life for elderly and this population tends to be more productive and resilient generally (Berkman, Boersch-Supan & Avendano, 2015).

The retirement-income systems in Asia are not well prepared for the rapid growth of population ageing which will take place over the next twenty years. (Heller, 2006). A number of evidence consistently indicates that initially in many countries the retirement age was lower compared to current policy which states that minimum age is sixty (60) and the retirement age can be prolonged. For instance, Shi (2014) who carried out a study in China stated that proper adjustments should be done according to the socio-economic development and population.

The current retirement age in China is 65 years for men and 55 years for women who are in white-collar profession and 60 years for men and 50 years for women who are in labour-intensive fields (Haacke, 2015). In addition, Huang (2013) stated that many western countries have policies where the retirement age is delayed as they aim to increase the income and decrease the disbursements. This is because due to the increase number of elderly population, the pension payment is increasing. Usually the retirement age would be above 60. For instance, the retirement age in the United States of America is 66 years old for both male and female (refer to table 2.1).

The increase of retirement age results in reduced number of pensioners and pension expenditure as well and these would positively affect the amount of pension contributions. Thus, the findings for certain countries suggested in increasing the retirement age by re-designing their pension systems to encourage their employees to be longer in the labour force (Eichhorst et al., 2011). In the United States, researchers found that majority of elderly employees are well- prepared to work beyond the retirement age because they are fit to work to earn some income and there is an increase in life expectancy (Tishman, Looy & Bruyere, 2012).

The impact of extending retirement age would affect the competitiveness of enterprises. Shi (2014) stated that, the state-owned and collective enterprises faced depression problems because they have to pay a high insurance as the labour costs primarily composed of pension and insurance. The broader the age for retirement, the lower would be the contribution rate. When the contribution is low, the burden of the enterprises reduces and it results in the growth of the enterprises and automatically it aids in absorbing more labour force. Australia retirement income system is one of the best in the world with prolonged retirement age. The minimum retirement age is only at 65 and the minimum age will increase to 67 over the next decade (Agnew, 2013).

However, prolonged retirement age affects the employment of young ones. 25 million Baby Boomers who are 40 per cent of the U.S. labour force will be leaving the labour force in a large number by 2020 (Tishman, Looy & Bruyere, 2012). Employees are less prepared to face the gradual changes in the labour force with increased number of elderly employees than younger employees (Pitt-Catsouphes & Matz-Costa, 2009). Elderly people gained various experiences from the number of years they have worked. Thus, they are valuable and productive in the labour force and this contributes to the economic growth (Radovic-Markovic, 2013). Elderly individuals' expertise is needed for the development of certain matters, but prolonged retirement age would affect the younger generation.

The researcher also found that demographic characteristics like age, sex, the status of current employment status, and personal health influence elderly people to continue working. In China it was reported that elderly with white and blue collar professions gave opposing opinions regarding prolonging of retirement age. Those with white collar professions like government officials, teachers, doctors, accountants and engineering agreed to work longer than their retirement age and those with blue collar professions like labourers disagreed with the rise of retirement age (Zhang, 2015). Elderly employees are capable of working closer to capacity than younger employees; however, most of them are inhibited from performing well in physically demanding work (CDC, 2012). For instance, elderly employees in Taiwan face challenges in remaining working in their old ages. Once they are retired, they find it difficult to seek for odd jobs to survive or to maintain their personal and family standard of living (Lu, 2012).

In brief, based on the previous studies the retirement age policy has been changed to ensure that the elderly individuals keep abreast with the progress of demographic changes and aging. There is a need for a broader look at the retirement age policy as many elderly individuals are facing challenges to fulfil their dreams and plan for their financial security even when they are approaching their retirement.

Pension funds. Pension funds play an essential role for retirees as these funds are collective contributions from the pension plans planned by the employers or the organisations where the employees worked before. Every month, a minimal amount will be taken from the employees' salary and put in any pension funds. Later, the employees can use up the funds upon retirement. Every country has its own pension funds for the employees.

In Singapore, government developed Central Provident Fund (CPF) for the employees. It is a social security savings plan that gives a sense of security and confidence for employees' retirement years (Central Provident Fund Board, 2016a). CPF Life is introduced to provide employees who are aged 65 and above a monthly payout for as long as they live (Central Provident Fund Board Singapore, 2015).

Singapore citizens and permanent residents are placed on CPF Life. It is also stated in the report that employees who are not placed on CPF Life can opt to join in this scheme between the age of 55 and 80.

CPF Life consists of two plans; CPF Life Standard Plan and CPF Life Basic Plan. In CPF Life Standard Plan, employees' savings in their retirement account will be deducted twice. First deduction is done at the age 55 from employees' Retirement Account (RA) according to their Basic Retirement Sum. Second deduction is done one or two months before employees' payout eligibility age and this round the rest of the RA savings will be deducted as the second instalment of their annuity premium. In CPF Life Basic Plan deductions from RA savings will be done twice as well; however, the actual percentage of deductions will depend on employees' age and gender. So, the employees will be informed about the deduction amount once their policies are issued (Centre for Seniors, 2010).

CPF members are also exposed to housing schemes. Savings from CPF Ordinary Account (OA) can be used to buy new or resale Housing and Development Board (HDB) flat under the Public Housing Scheme (PHS) or to buy or build private residential property for occupation or investment under Private Properties Scheme (PPS). (Central Provident Fund Board, 2016b). The board also states that CPF members will be insured under Home Protection Scheme (HPS) which protects them and their families against losing their homes if the members passed away or if they experience permanent disability before they finish up their housing payments.

CPF members are also exposed to health schemes. For instance, Medisave is a saving scheme which aids members to save a portion of their income for their personal or immediate family's hospitalisation, day surgery and other outpatient expenses in future (Central Provident Fund Board, 2016a). For this scheme, employees contribute 8%-10% from their monthly income. 8% monthly contribution is done by employees who are aged 35 and below. 9 % monthly contribution is done by employees who are aged above 35 to 45. 10% monthly contribution is done by employees who are aged above 45 to 50. 10.5% monthly contribution is done by employees who are aged above 50. The above following rates are for employees who earn more than $ 1500 per month and the rates for those who earn less than $ 1500 is different (Ministry of Health Singapore, 2016, para.3).

Besides that, MediShield Life is a basic health insurance plan provided by the CPF which can be useful for members to settle large hospital bills and for expensive outpatient treatments like dialysis and chemotherapy for cancer (Ministry of Health Singapore, 2015). Private Medical Insurance Scheme (PMIS) in CPF allows the members to utilize the Medisave savings to buy Integrated Shield Plans (IPs) for them and their family members including their parents, spouse, children and grandparents (Central Provident Fund Board, 2015a). In CPF ElderShield is provided for disabled individuals and it is a reasonable insurance scheme with basic financial protection. Individuals with ElderShield will be given a monthly cash payout for their expenses up to seven years. At the age of 40, CPF members who have Medisave Account (MA) will be offered ElderShield (Central Provident Fund Board, 2015b).

In Malaysia, government has several pension funds like Employees Provident Fund (EPF) and the Social Security Organization (here after SOCSO), the Government Pension Scheme for Civil Servants and the Old Age Benefit Scheme for the Armed Forces (Yin-Fah & Paim, 2010). These funds act as social security and they provide benefits for the members who will be retiring. Retirees will be given service pension on monthly basis, service gratuity in lump sum payment and cash award in lieu of leave, when applicable in lump sum payment as well. According to

Jabatan Perkhidmatan Awam (2005), the rate of gratuity and pension will paid to retirees based on the following calculation:

a) Gratuity

● 7.5% x number of months of reckonable service x corresponding last drawn salary.

b) Pension

● 1/600 x number of months of reckonable service x corresponding last drawn salary.

● subject to a maximum pension of three fifth (3/5) of the last drawn salary (after a service of 30 years or 360 months of reckonable service)

c) Cash Award in lieu of Leave (GCR)

● 1/30 x [basic salary + fixed allowances] x no. of leave accumulated up to 120 days.

However, even with the existence of these funds, having sufficient savings upon retirement is being an issue. Despite of having several pension funds, EPF remains as the main income security upon retirement. Almost half of labour force population in Malaysia are EPF members from private, non-pensionable public sector and self-employed employees (Sim & Tengku Aizan, 2010).

Abd Samad and Mansor (2013) explained that Malaysians are facing challenges of having sufficient savings upon retirement. According to Ekerdt and Hackney (2002), there are many people who do not have sufficient knowledge on the fundamentals on how to save and invest and they also are not fully aware of the chances provided for retirees. These cause many retirees to live an undesired life upon retirement (Cutler, 1997; Mitchell & Moore, 1998; Moore & Mitchell, 2000; Report, 1998; Uccello, 2001).

This could be even more challenging with the increase of life expectancy of elderly. In Israel it was found that among 550 elderly respondents, 42.6 per cent claimed that their pension funds were insufficient for their entire life (Litwin & Meir, 2013). Similarly, statistics has shown that the average retirement saving of Employee Provident Fund (EPF) members in Malaysia is insufficient for their whole life (Agnes Paulus Jidwin, Jasman Tuyon & Rosalan Ali, 2011; Fazilah, 2003). Even with relatively high contribution rates of 11 per cent of basic pay by employees and 12 per cent by employees, individuals with low income will not accumulate sufficient savings for retirement as the amount contributed to EPF is directly related to individuals' monthly salaries (Caraher, 2003).

EPF survey in Malaysia back in 2003 indicated that 14 per cent of the members used up all their EPF money within three years and 70 per cent of the retirees used up their savings within 10 years of retiring (Rashvinjeet, 2011). A recent study indicated that 86 per cent of EPF contributors failed to have adequate savings to be used through upon retirement. These studies included 2,427 former EPF contributors and the surveys found that 14 per cent of the retirees used up their savings in 3 years, half of them ran out of savings in 5 years and 70 per cent of them finished up their saving in ten years (Ministry of Human Resources, 2013).

Malaysian employees contribute 20 per cent of their income every month to EPF and by doing this most of them think that their retirement is protected by the savings that they have in EPF which is only1/5 of the salary. Many failed to realise that the money in the EPF account cannot be used throughout their retirement period (Dahlia Ibrahim, Zuraidah Mohammad Isa & Norhidayah Ali, 2012). In the latest

Malaysia EPF 2014 Annual Report, there are 14,192,832 members and 6,659,036 members are actively contributing (Kumpulan Wang Simpanan Pekerja, KWSP, 2014, p.2).

These figures indicate that many are not aware of retirement readiness and fewer studies emphasised on how actually they allocate their EPF fund upon retirement. Despite of receiving monthly pension every month as a retirement income, individuals who would want to live a comfortable life upon retirement by enjoying sufficient standards of living upon retirement will need to work longer and have extra savings (OECD, 2013).

Overall, the reviews of previous studies indicated that every country has its own pension fund for employees. In Malaysia, government has several pension funds like Employees Provident Fund (EPF) and the Social Security Organization (here after SOCSO), the Government Pension Scheme for Civil Servants and the Old Age Benefit Scheme for the Armed Forces. Despite of having various type of pension funds, retirees find it difficult to cope with their financial matters upon retirement. Previous surveys on EPF proved that almost all the retirees used up their savings within 10 years. This indicates that many Malaysians are lacking in financial literacy education. Thus, there is a need for a broader research on this issue.

Retirement Planning

Planning for retirement is an important process to ensure that individuals can have sufficient savings for living a lifestyle that they want upon retirement. It involves an individual's ability to make decision on when to save, how much to save, when to stop working and also when to start using resources that have been saved initially (Topa, Mariano & Moreno, 2012, p.528). Planning starts from one individual. An individual with sound personal financial plan is able to deal with financial matters wisely (Tan, Hoe & Hung, 2011). However, it was found that younger generations who are working think that retirement planning is a burden for them as they need to plan for long-term financial matters (Krishna Moorthy et al., 2012).

Financial literacy is closely related to financial planning (Boisclair, Lusardi & Michaud, 2014).There is a strong positive relationship between retirement planning and financial relationship (van Rooij, Lusardi & Alessie, 2012). Arrondel, Debbich and Savignac (2013) explained that individuals with higher levels of financial literacy have high chance of planning for their long-term future. A study among Dutch students showed that there is a positive and significant effect of advanced levels of financial literacy on retirement planning (van Dijk, 2012).

Individuals with lower level of education tend not to plan and save for retirement and individuals also face difficulty to calculate their retirement needs when they cannot perform simple and compound interest calculations (Lusardi & Mitchell, 2006). Individuals with lower income tend to plan their retirement wisely when they are equipped with financial literacy. Individuals with higher income tend to be aware with basic features of retirement income system, regardless of their measured level of financial literacy (Boisclair, Lusardi & Michaud, 2014). Individuals with higher levels of income and education tend to plan for retirement by having a bigger proportion of saving for retirement (Helman, Greenwald&Associates, Adam, Copeland & VanDerhei, 2014).

Encouraging retirement planning for individuals to ensure that they have long-term planning for their retirement is pertinent. The findings from several studies indicate different results on planning for retirement and retirement satisfaction. Initial research found that there was a positive relationship between retirement planning and positive attitudes and successful retirement (Mutran et al., 1997). Contrastingly, another study found that retirement planning failed to predict retirement satisfaction even though there was a small positive relationship between retirement planning and retirement satisfaction (Topa, Moriano, Depolo, Alcover & Morales, 2009).

Retirement planning process involves decision making and retirement transition and adjustment. Formal and informal retirement planning improves individual's confidence in making any decisions in retirement matters (Taylor-Carter, Cook & Weinberg, 1997). Individuals set clear goals to plan their future upon retirement. By setting specific goals, individuals develop behaviours that influence their decisions (Busch, Dittrich & Lieberum, 2010). Retirement decision making are based on either voluntary retirement or involuntary retirement.

Involuntary retirement is for retirees who leave their workforce earlier due to several reasons like poor health, retrenchment, or become care giver for someone (Australian Centre for Financial Studies, 2014; Barrett & Brzozowski, 2010). Several studies indicated that those who chose involuntary retirement will be less prepared when they retire compared to those who choose voluntary retirement (Elder & Rudolph, 1999; Wong & Earl, 2009).

Mohd Fitri Mansor, Chor, Noor Hidayah Abu and Mohd Shahidan Shaari (2015) stated that individuals who do not plan retirement well would need to continue working to maintain their living expenses even upon retirement. According to a report in OECD (2008, p.1), 2008 pension systems do not secure income in old age and specifically there are four reasons why many Asia/Pacific countries retirees do not have sufficient savings if they only depend on pension systems:

- Coverage of formal pension systems is relatively low.
- Withdrawal of savings before retirement is very common.
- Pension savings are often taken as lump sums with the risk that people outlive their resources.
- Pensions in payment are not automatically adjusted to reflect changes in the cost of living.

However, the current OECD report highlighted that approximately half of OECD countries have improved the finances of pension systems by increasing taxes and contribution rates in defined-benefit systems (OECD, 2015, p.13). Comparatively, Malaysia as a developing country has improved the pension system. In Budget 2012 Malaysian Government introduced Private Retirement Scheme (PRS) to encourage individuals to invest and accumulate retirement savings for their old age (Mohd Najib TunAbdul Razak, 2011). Prime Minister stated that PRS is an extension of Private Pension Fund whereby there is a tax relief up to RM6000 for EPF and life insurance.

Individuals contribute to the PRS voluntarily and they may opt to invest in PRS scheme based on their needs of retirement, retirement goals and risk that an organisation is willing to take (Private Pension Administrator, 2016). Private Pension Administrator (PPA) is established by Securities Commission (SC) to give good service and accessibility to investors, to develop awareness about PRS and provide sufficient data and research information related to PRS and also to ensure that investors can access their investments information easily (Lembaga Hasil Dalam Negeri, 2014). SC has approved eight PRS providers which are AmInvestment Management Sdn Bhd; American International Assurance Bhd; CIMB-Principal

Asset Management Bhd; Hwang Investment Management Bhd; ING Funds Bhd; Manulife Unit Trust Bhd; Public Mutual Bhd; and RHB Investment Management Sdn Bhd (Securities Commission Malaysia, 2012).

Individuals as young as 18 years old can voluntarily invest in PRS to accumulate more retirement savings regardless of whether they are EPF members or not and the PRS can complement EPF members' savings (CIMB-Principal Asset Management, 2011). The bank also highlighted that individuals get RM6000 per year tax relief for savings contribution and life insurance premiums and additional personal tax relief up to RM3000 per year. Investing in PRS has several benefits namely professional management, flexibility and tax incentives (Public Mutual Berhad- Private Retirement Scheme, 2016). By referring to the objectives of individuals investing in PRS, funds are professionally managed. Besides that, individuals can invest in PRS flexibly as there are no certain fixed amounts or fixed periods. The income that members receive from PRS is exempted from Malaysia income tax.

In a recent panel discussion, Dato' Steve Ong, chief executive officer of the PPA Malaysia explained that PRS is a national scheme which individuals can confidently invest in as it is safe, structured and it provides a system for private and civil employees and also for self-employed who do not contribute to EPF or do not put money into their bank accounts (Yip, 2015). In addition, the publisher from the Edge Media Group currently reported Malaysians should also consider about other alternatives for their retirement planning like PRS and regular savings plans that provide continues source of income in future upon retirement (Supriya Surendran, 2016).

Previous studies emphasised on the importance of financial retirement planning. The highlight of being good in planning for retirement is to live a desired lifestyle upon retirement without facing any financial constraints. Despite of half of OECD countries have improved the finances of pension systems by increasing taxes and contribution rates in defined-benefit systems many are struggling to plan their finance for retirement. Therefore, it is crucial to further investigate on this issue and spread the awareness to people because planning starts from individuals themselves. Individuals who are aware of the importance of planning for retirement and have financial literacy surely will make wiser financial decisions to plan for their retirement ahead of time.

Financial Literacy

The concept of financial literacy is closely related to retirement planning. Financial literacy is defined as having pertinent amount of knowledge and skills required to make economic and financial decisions confidently to manage financial resources effectively (Hung et al, 2009, p.10; Ministry of Education Ontario, 2010). Financial literacy is also understood as increasing set of financial knowledge, abilities and approaches where the individuals form on throughout life and it is influenced by their mobilization of cognitive and practical skills, attitudes, motivation and values (Programme for International Student Assessment, PISA, 2012). Thus, financial literacy includes two components; first, acquiring financial knowledge and ability and second the relation between financial knowledge and ability which is build based on individuals' education or experience on finance concepts and products (van Dijk, 2012).

Global monetary crisis has created a great concern among worldwide policy makers who are worried about financial illiteracy. (OECD, 2009; Olima , 2013; Miller, Godfrey, Levesque & Stark, 2009). The survey report from 15 countries in Americans, Europe and Asia indicated that due to financial constraints on households only 28 per cent of employees had sufficient money to invest for their retirement (AEGON, 2014). Literature confirmed that global monetary crisis associated with higher household well-being and governments all over the world are seeking for opportunity to expose to their people on ways to enhance the level of financial literacy (Atkinson & Messy, 2012).

Wise financial planning comes along with good financial literacy. Many previous studied have proven that there is a strong relationship between financial literacy levels and effective financial planning at retirement. For instance, in Saudi it was found that there was a significant difference between the levels of financial literacy of males and females. Males were more financially literate because they were the ones who made financial decisions for their families (Mian, 2014).

Individuals who equip themselves with financial literacy would be wise enough to spend less amount than the income that they get monthly and therefore they would have sufficient savings when their income reduces especially upon retirement (Lusardi & Mitchell, 2013). In a report done by The National Summit on Retirement Savings (1998), summary of 20 years of research on retirement finance indicated that 80 per cent of elderly in America depend on social security for income upon retirement. These scenarios have resulted in the increase of demand for financial education courses. Every individual is required to have financial literacy whereby he or she has the pertinent skills to make proper saving decisions (OECD, 2013).

Similarly, in the United States it was found that those who have financial literacy can make an ideal retirement decisions (Clark, 2012). In addition, in the report of the results from the 2011 ANZ survey, it was stated that financial literacy is a combination of an individual's skills, knowledge, attitudes and also their behaviours with regards to money (Adult financial literacy in Australia: Full report from the 2011 ANZ survey, 2011). The literacy is developed by individuals based on their interest or goal in saving up for the future especially upon retirement. Everyone can attend financial literacy courses but definitely not everyone has the talent or competence to practice it.

There are four main importance of financial literacy (PISA 2012 Financial Literacy Framework, 2013). Firstly, financial literacy is essential in overcoming the risk shift. Individuals who are responsible to plan their financial upon retirement are expected to save more through pensions and other long-term saving products (AEGON, 2013). Many governments tend to decrease the amount of pensions for retirees due to lower mortality and fertility rates (Ntalianis & Wise, 2011). Therefore, individuals are able to save for their own financial security upon retirement.

Secondly, as a consequence of changes that take place in the market and economic the number of financial decisions that individuals make has increased. Thus, more wise financial decisions are made to save cash for much longer periods of retirement. There are a number of studies which have indicated that individuals have more positive personal finance behaviour when they have higher levels of financial literacy (Gale & Levine, 2010; Lusardi & Mitchell, 2014). It is appropriate for elderly to make wise financial decisions to save sufficient money for expenses like for healthcare which have been increasing. Thirdly, financial literacy is essential as elderly need to deal with increased supply of various financial products and services (PISA, 2012). Elderly need to make comparisons in terms of the prices, interests, the length of contract and the risk they might face before purchasing any products as they are becoming more complex.

Lastly, the elderly should also be on par with the younger generation in order to make the process of purchasing products through online banks and other possible channels because with the improvement of current technology, societies deal lesser with cash and this is why elderly generation need to have financial literacy. Elderly should have confidence in the benefits of current technologies and they should obtain pertinent skills to deal with the technologies (Abad, 2014).

Financial readiness should be given utmost importance as retirement wellbeing should be enhanced. Lusardi and Mitchell (2013) stated that the development of financial literacy internally has essential effects for welfare and policies which improves on the levels of financial knowledge in a larger population. Many retirees face ample of unexpected expenses upon their retirement and that would indirectly urge them to use up their pension, EPF savings or their own savings. Then, after several years down the road they will face financial difficulties. Most elderly who work in private sectors claimed that within four years of retirement, their EPF savings often finish (Tung & Comeau, 2012).

In a survey report on risks and process of retirement which was done in 2011 in America, only 6 % of retirees and 5 %of pre-retirees claimed that they have $1 million or more in savings and investments. The percentage of retirees and pre-retirees having least savings are higher; 25 % of retirees and 21 % of pre-retirees. They have less than $25,000 in savings and investments (Society of Actuaries, 2012, p.2). Many governments around the world reported that most of their citizens are lack of financial literacy and this has resulted in financial crisis. Many households are not familiar with the most basic economic concepts which are needed to make wise saving and investments decisions (Lusardi & Mitchell, 2007).

In order to overcome this scenario, an International Network on Financial Education (INFE) was developed to get inputs on financial literacy among worldwide public experts, to promote the growth of the analytical work and also the policy recommendations (OECD, 2013). Furthermore, INFE also emphasises on financial literacy and education policy areas namely financial education courses, financial education in schools and national strategies for financial education.

On top of that in Malaysia, "Future of Retirement" survey carried out by HSBC Liquid (2010) proven that 70 per cent of respondents were fear of not having sufficient money after they have retired and only 34 % of Malaysians were actually saving up money on a regular basis for their retirement funds. This elderly should plan ahead so that they do not face hardship several years down the road upon retirement. A number of retirees may even maximise their skills and productive contribution to face the current economic climate.

Financial readiness is one of the challenges that is commonly faced by retirees in Malaysia. The early retirement age could be the main reason for many Malaysians to face problem in preparing themselves to retire with financially stabled condition. Yoong, See and Baronovich (2012) explained that, due to the ageing phenomenon in Malaysia policy makers encountered serious problems as the elderly have little savings when nearing retirement and they also become heavy financial burden for those children who are dependent.

Due to increasing living cost, many people are facing difficulties in saving up money because their monthly salary is just sufficient for household expenditures, medical bills and managing children's schooling expenses. It is also challenging to save up money and when the retirees only depend on the EPF savings or pension scheme. In America, the demand to contribute in the labour force among elderly aged 55 and above are high because they want to continue working to accumulate more savings (Copeland, 2014).

According to a current study by HSBC (2013a, p.5), average retirement incomes in the 34 OECD (Organisation for Economic Co-operation and Development) countries like Australia, Canada, Denmark, Poland, United Kingdom, United States, Austria, Belgium, Chile, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and Turkey lasts over 18 years.

A study showed that there was a positive effect of financial literacy and retirement preparation (Alessie, van Rooij & Lusardi, 2011). An interesting finding was identified by AEGON (2012, p. 19) where 62 % of respondents claimed that they were aware of the need to save for retirement but only 24 % of them hardly saving at all for their retirement. Figuring out monthly expenses is crucial to figure out how much one need for retirement (Sightings, 2014). There are a lot of unknown variables that elderly would come across upon retirement like increased life span of an individual, life events, and world's economy; thus, planning monthly expenditure is essential (Parker, 2014).

Unexpected expenses may take place upon retirement namely for medical expenses (Schwartz, 2013). Thus, one should calculate the total money that need roughly for the matters mentioned above and when they do these, they will have the check list to ensure that they are financially ready before they retire (HSBC, 2013). Advices from experts are needed by elderly on saving sufficient money for retirement (Robb, Babiarz & Woodyard, 2012). Experts who have experience in planning for their finance would be able to guide individuals to plan their retirement well.

Recently, the expenses are more than the salary that individuals get every month and the costs for healthcare are so expensive yet it is so essential for the elderly. Spending and saving behaviour is essential to save up for retirement. The need to provide income security in old age will continue to grow in years to come. Employees in many nations have grown accustomed to increasingly early retirement. The aging population is expanding; longevity continues to increase in most countries and the family is no longer a primary source of old-age support (Mitchell, 1992; Suzman & Beard, 2011).

The expenses are increasing and not favourable with the salary that individuals get every month. The salary is sufficient for their daily expenses and other related spending. Family caregivers bear a devastating financial and emotional burden as they have to sacrifice other family and work responsibilities (United States Senate, 2013). It is a dilemma for the elderly who depend on their children to support them in terms of financial matters especially handling medical bills.

A study in Malaysia involving 2321 Malaysian elderly aged ranging from 55 to 75 found that financial needs, independence, dignity and enjoy working contribute towards elderly’s need to continue working upon retirement are the contributing factors that lead the elderly to either continue working upon retirement or stop working (Chan et al., 2010). However, the finding by Crossan, Feslier and Hurnard (2011) in New Zealand proved that financial literacy is not significantly related with planning for retirement. The researchers stated that this finding could be due to the retirement income security given to retirees in New Zealand.

Financial literacy is a crucial component which contributes towards successful retirement planning. People with good financial literacy background can confidently plan for their retirement. Literature reviews on financial literacy have proven that many people are financial illiterate; they do not have knowledge on basic economic concepts which are important in making sound saving and investment decisions. Therefore, there is an important need to carry out studies on financial literacy and the related areas like financial education courses, financial education in schools and national strategies for financial education.

To Work or To Retire?

The retirement age policy consists of minimum retirement age. Every employee is required to retire at one stage of time. The retirement age in every country defers (Refer to table 2.1). However, every employee faces the dilemma whether to continue working upon retirement by doing any other part time jobs or working on contract basis or to retire and enjoy their retirement with family (AEGON, 2012). Many employees have intention to continue working upon retirement to save up more for retirement (Copeland, 2014). However, due to deterioration of health elderly employees would not be able to work in physically demanding working circumstances (Werder & Thum, 2013).

In Netherlands, despite of good health, employees retire early while they are healthy (Wind et al., 2013). The employees indirectly were ‘forced’ by the government to quit their jobs as the government wanted to provide more opportunities for younger generation to perform in the labour market (Kalwij, Kapteyn, & de Vos, 2010; Visser, Gesthuizen, Kraaykamp, & Wolbers, 2014;Visser, Gesthuizen, Kraaykamp, & Wolbers, 2014). However, recently Dutch politicians and the policy makers limited the amount of early retirees. They increased the retirement age from 65 to 67 years old (Visser et al., 2014).

In Netherlands, many elderly individuals continue working for pay upon retirement for several reasons; like working, social contacts, money, boredom and other. Surprisingly money factor was in the second place as on average Dutch elderly individuals are financially stable (Smits, van den Beld, Aartsen & Schroots, 2013; Henkens & van Solinge, 2013). Most of them continue working because they like working (Henkens & van Solinge, 2013).

In Singapore, employees aged 60 and above have increased from 3.7% in 2004 to 9.3% in 2013, and further increased to 10.3% in 2014 (Singapore Ministry of Manpower, 2014). The minimum retirement age in Singapore is 62 years old and employers in Singapore must offer re-employment to allow employees to continue working upon retirement age (Singapore Ministry of Manpower, 2016). Almost half of the retirees are hoping to continue working upon retirement as they mentioned that they need 66% of their current annual household income every month to live comfortably upon retirement (Singapore HSBC, 2013).

In Sweden, it was found that financial consideration was one of the key factors which urge individuals to continue working (Nilsson, Hydbom & Rylander, 2011). In another study done in Sweden, it was found that a farmer mentioned there is no necessity for him to continue working upon retirement as he gets pension and he can do anything that he wants and another individual mentioned that he continued working upon retirement to earn extra income as bonus despite of getting monthly pension (Nilsson, 2012).

Luke, Mcllveen and Perera (2016) carried out a thematic analysis in Australia to figure out the reasons for working upon retirement age and five key themes were identified; career adaptability resources, reasons to disengage (i.e., retire), reasons to re-engage (i.e., rehire), family, and benefits to workforce. Another study in Australia revealed that, elderly nurses who continued working in their late 50s and early 60s in Australia said that they wanted to be 'self-funded' as they do not want to be dependent on retirement benefits provided by government and they want to enjoy their retirement as they desire (Warburton, Moore, Clune & Hodgkin, 2014).

Working longer upon retirement and the impact on financial planning. In many countries, the retirement age is above 60 years old. Certain governments like in Greece, Iceland, Israel, Norway and Spain decided the retirement age to be at 67. Many studies indicated that elderly would want to continue working upon retirement age. Kingson and Morrissey (2012) stated in a report on prolonged retirement age that elderly Americans would have problems like poor health, physically demanding jobs and/or jobs with difficult working conditions, uncertain employment prospects, and caregiving responsibilities and these would be the challenges for elderly to continue working upon retirement. Poor health conditions enable elderly to perform any physical tasks. The researchers also found out that 45 per cent of elderly employees aged 62 to 69 involved in physically demanding jobs.

However, there are also arguments which support the increasing of full retirement age. Certain parties stated clearly that increase of full retirement age is essential because it can aid in improving health of elderly population, deteriorating in sharing jobs which need physical labour, and also in solving financial deficits in Social Security (American Academy of Actuaries 2010; Committee for a Responsible Federal Budget 2010; Gale 2010; Ghilarducci 2008; Johnson 2011; Kingdon & Rivlin 2008; National Commission on Fiscal Responsibility and Reform 2010). Thus, elderly employees continue working for survival.

A national survey in Australia found that many retirees stated that they would want to continue working either on full-time or part-time basis because Global Financial Crisis (GFC) has affected their sense of financial security (Kendig, Wells, O'Loughlin & Heese, 2013). In a recent study on Malaysians' perceptions on contributions to human capital development, the findings revealed that a majority of elderly individuals would want to share the skills and knowledge that have accumulated throughout their working years as they would want to utilize the time after retirement meaningfully and also for them to earn extra income (Kenayathulla, Alias & Siraj, 2016).

Employment rates. A study was carried out by Eichhorst et al., (2013) to give an overview to others on the situation of employment of young and elderly employees in European Union (EU) Member States and figure 2.3 and 2.4 indicate the employment rates.

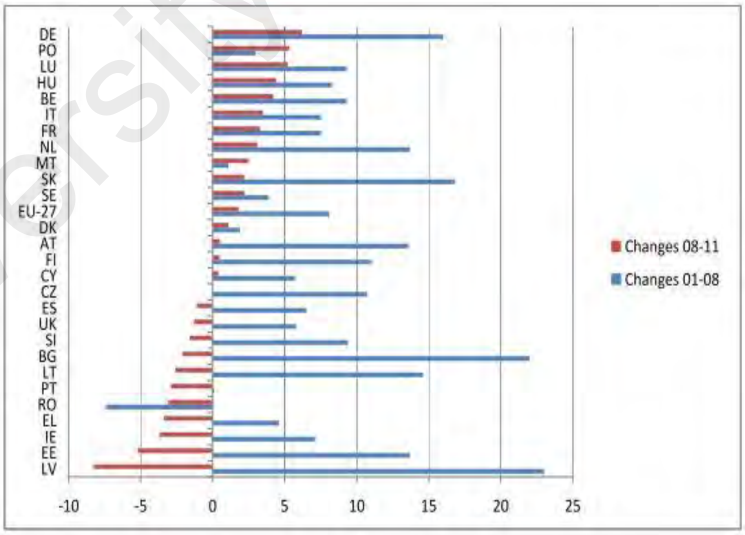

Figure 2.3 Changes in employment rates of younger employees (15-24), 2001-2008 and 2008-2011.

Adapted from *Combining the Entry of Young People in the Labour Market with the Retention Older Employees*, by Eichhorst et al., 2013, European Parliament, p.15.

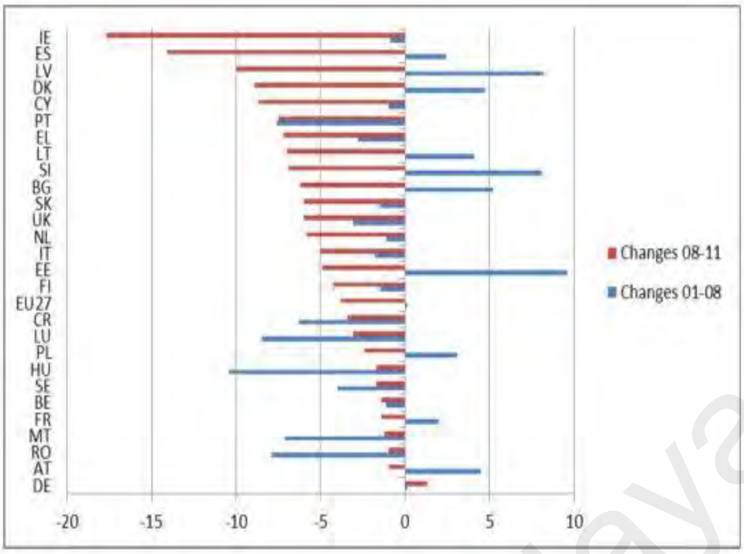

Figure 2.4 Changes in employment rates of older employees (55-64), 2001-2008 and 2008-2011.

Adapted from *Combining the entry of young people in the labour market with the retention older employees*, by Eichhorst et al., 2013, European Parliament, p.16.

The above figures show the changes of employment rates of younger and older employees. German employment rate of younger employees rose to 46.6% in 2008 and it continued to rise to 47.9% in 2011. This indicates the only country in the EU-27 area where the employment rate of younger employees increased in times of financial and economic crisis is Germany. However, five other countries recorded an increase over the past decade, namely Estonia (from 26.8% in 2001 to 31.5% in 2011), Austria (from 51.4% in 2001 to 54.9% in 2011), Slovenia (from 30.3% in 2001 to 31.5% in 2011), Poland (from 24.2% in 2001 to 24.9% in 2011) and France (from 29.3% in 2001 to 29.9% in 2011) (Eichhorst et al., 2013, p.16).

In Spain, Denmark, Latvia, Lithuania and Bulgaria, an increase during the 2001-2008 period was offset by a vast decrease in the 2008-2011 period. For instance, in Spain, the employment rate of younger employees peaked at 39.5% in 2006, yet dropped to 36% in 2008 and subsequently continued to decrease towards its lowest point of 21.9% in 2011. Furthermore, three countries recorded a continuous reduction in the employment rate of younger employees over the past decade: Portugal (from 42.3% in 2001 to 27.2% in 2011), Hungary (from 30.4% in 2001 to 18.3% in 2011) and the United Kingdom (from 55.5% in 2001 to 45.4% in 2011). (Eichhorst et al., 2013, p.16).

Three countries experienced massive decline in the 2008-2011 period. In Ireland, the employment rate for younger employees declined from 45.9% in 2008 to 28.2% in 2011; in Cyprus, it decreased from 38% to 29.3%; and in Greece, it fell from 23.5% to 16.3%. Besides Greece, the only countries where less than 20% of the 15 to 24 year old population was employed in 2011 are Hungary, Italy and Lithuania (Eichhorst et al., 2013, p.17).

The EU-27 employment rates of older employees (aged 55 to 64) continuously increased over the past decade. It occurred in all Member States during the 2001-2008 periods, with one exception: in Romania, the employment rate of older employees fell from 50.5% in 2001 to merely 37% in 2004, yet restored to 43.1% in 2008. Besides, employment rates of older employees rose by over 20 percentage points in Latvia and Bulgaria, and over 10 percentage points in Slovakia, Germany, Lithuania, Estonia, the Netherlands, Austria, Finland and Czech Republic. In most EU Member States, this increase continued despite the financial and economic crisis (Eichhorst et al., 2013, p.18).

However, in Estonia, Latvia, Lithuania and Bulgaria, part of this increase was negated in the 2008-2011 period, which was also the case for the United Kingdom, Ireland, Spain, Greece and Slovenia. In Portugal, the decrease in the 2008- 2011 period outweighed the increase during 2001-2008, and the employment rate of older employees in Romania continued to fall. Besides Greece and Romania, less than

40% of the 55 to 64 year old population was employed in 7 other countries in 2011, namely Luxembourg (39.4%), Belgium (38.7%), Italy (37.9%), Poland (36.9%), Hungary (35.8%), Malta (31.7%) and Slovenia (31.2%). By contrast, employment rates for older employees were particularly high in Sweden (72.2%). Ten other EU Member States had an employment rate between 50% and 60% for older employees. (Eichhorst et al., 2013, p.18).

Eichhorst et al., (2013) also reported findings on measures to increase employment among younger and elderly employees. Previous studies have showed that individual differences are more essential between members of the similar age group than across age groups. Conversely, the education level or professional experiences are considered very important for younger individuals who are seeking for jobs. For instance, in Belgium, Ireland and France it was proven that investment in education was essential; however, in Southern European countries and the United Kingdom the work experience was most important criteria. Every country has its own perception on essential way of seeking for jobs in labour market.

Economists in the United States predicted that over the next 15 years this country will be facing problem in terms of shortages of labour force and talents. Pitt-Catsouphes and Smyer (2005) explained that four of every five baby boomers will work beyond retirement age either due to their interest to continue working or to earn extra income. Many who retire at the age of 60 face financial difficulty as they will not have sufficient amount of money to steadily support themselves.

However, in a study the finding indicates that only 23 per cent of the aged population (60+) was employed and this was a decline from 33 per cent in 1980. This result was different compared to the global trend where the OECD report showed that the proportion of elderly individuals who are inactive per employee will increase from 38% in 2000 to more than 70% in 2050 within the OECD countries. (Chan et al., 2010, p.125).

In brief, the retirement age is fixed by governments. However, many are facing the dilemma either to continue working or to relax at home upon retirement. A number of previous studies indicated that many elderly individuals would want to continue working because they need to continue supporting their spouses and children financially. Most of them retire without having sufficient savings.

Contributing Factors Associated With Retirement Planning

Demographic factors. Demographics are studies about a population based on factors like age, race, sex, economic status, level of education, income level and employment, among others (Investopedia, 2016). Demographic factors are analysed to learn more about a population. The findings for each population are different because the demographic factors vary accordingly. Demographic factors like age, education level, gender, and household income are considered important in studies related to retirement planning (Mohd Fitri Mansor, Chor, Noor Hidayah Abu & Mohd Shahidan Shaari, 2015).

Several studies analysed the effect of age on retirement planning. It was found that, as an individual grows older, he or she tends to have more knowledge on financial matters and this aid in retirement planning (Taqadus Bashir, Asba Arshad, Aleena Nazir & Naghmana Afzal, 2013). Middle aged individuals who aged between 40 and 60 found to be more financially literate (Lusardi & Mitchell, 2011; Arrondel et al., 2013) and Beckmann (2013) found that elderly individuals are less financially literate. However, the finding by Bhushan and Medury (2013) indicated that financial literacy is not affected by age. Saving regularity, gender, income and level of education are closely related to financial literacy and these results in positive outcome with retirement saving decision (Nurul Shahnaz Mahdzan & Saleh Tabiani, 2013). Several studies found that male can perform better in financial matters compared to females (Arrondel et al., 2013; Bucher-Koenen & Lusardi, 2011; Kharchenko , 2011).

There is a high chance for poor financial planning with a lack of financial literacy and educational attainment is related to higher level of financial literacy. Researchers found that higher level of educational attainment result in a more positive and greater financial literacy (Lusardi & Mitchell, 2011). Those who are financially illiterate are the ones with less education. In a telephone survey among 3502 randomly chosen adults in Australia, an interesting finding was identified. Those who have completed formal post-secondary education were very good in selecting financial products and staying informed. However, this group of people did not give priority to keep track the finances, or making financial plans for future. (Adult financial literacy in Australia: Full report from the 2011 ANZ survey, 2011).

Individuals who are financially knowledgeable are those who have completed university or college degree (Almenberg & Save-Soderbergh, 2011). They are more knowledgeable in terms of financial matters compared to those with lower level of education. Their education attainment plays an important role in enhancing the financial literacy. The findings on the educational levels and financial literacy in a study carried out by Kharchenko (2011) are consistent with Almenberg & Save-Soderbergh, (2011), Lusardi and Mitchell (2006, 2008); Worthington (2004), Guiso and Jappelli (2004) and Alexander, Jones and Nigro (1998).

In terms of gender, women with less education and low income are more prone to be financially illiterate compared to men in both developed and developing countries (Falth, 2014). Falth (2014) found that the financial literacy of those who were highly educated was different from those who had lower level of education. Therefore, since last time it was found that the level of financial correlates positively with financial literacy. Educational attainment is also positively correlated with financial literacy. While hardly a third of respondents with a primary level of schooling succeed in correctly answering the question on interest compounding, this share rises to 75% for respondents with a postgraduate level of education (Arrondel et al., 2013).

Generally, it is vital to analyse demographic factors because by doing so researchers can have better ideas about a population. It is proven that the findings for demographic factors vary according to each population. In carrying out studies on retirement planning, demographic factors like age, education level, gender, and household income are considered important.

Financial Attitudes. In determining financial literacy of an individual, the attitudes are considered as an essential component. Financial attitudes include the beliefs and values of an individual on numerous personal finance concepts like whether the person believes it is essential to save money (Chowa, Despard & Osei-Akoto, 2012). Positive and negative attitudes contribute towards the financial literacy of an individual. For instance, if individuals have negative attitudes towards saving money for their future, then they will not have the interest to gain knowledge on financial literacy. They would not want to equip themselves with financial knowledge and learn proper ways to save up their money for the future. On the other hand, if individuals have positive attitudes to save up money for future, they would want to equip themselves with pertinent knowledge on financial matters; therefore financial literacy is essential for them to make long term financial plans.

Result of a pilot study undertaken in 14 countries revealed that very few respondents in Armenia (8%) and Poland (19%) were satisfied with their savings (Atkinson & Messy, 2012, p.9). On the other hand, 64 per cent of Peruvians and 61 per cent of Albanians were satisfied with their savings. Albanians and Peruvians were holding on the traditions attitudes about money, with almost half of respondents (45%) disagreed that they have the money there to be spent. In contrast, only 2 per cent of Armenians and 12 per cent of Polish respondents tended to disagree with the statement. Table 2.2 gives an overview of the attitudes of respondents towards the longer term of savings from 14 countries.

Table 2.2

Attitudes towards the longer term

	Disagrees with the following attitude statements:		
	I find it more satisfying to spend than save it for the long term	I tend to live for today and let tomorrow take care of itself	Money is there to be spent
Albania	61%	66%	45%
Armenia	8%	60%	2%
Czech Republic	45%	69%	29%
Estonia	39%	49%	24%
Germany	49%	65%	26%
Hungary	56%	68%	33%
Ireland	38%	54%	30%
Malaysia	47%	57%	26%
Norway	57%		
Peru	64%	72%	45%
Poland	19%	45%	12%
South Africa	48%	60%	39%
United Kingdom	35%	50%	29%
BVI	60%	66%	31%

Each of the columns reports % of respondents putting themselves at 4 or 5 on a scale from Completely agree=1 to Completely disagree=5.

Note. Adapted from *Attitudes towards the longer term, by Atkinson and Messy*, 2012, OECD Working Papers on Finance, Insurance and Private Pensions, p.9.

In particular, 47 per cent of Malaysians said that they would prefer to spend their money rather than saving it up for the long term and more interestingly 57 per cent of them stated that they live moment by moment and let tomorrow take care of it as it is unpredictable. However, only 26 per cent of them stated that they have money there to be spent. Therefore, half of the Malaysian respondents tend to have negative attitude towards saving money and they have less financial literacy.

In short, the analysis of this survey indicated that financial literacy and financial attitudes resulted in a consistent positive relationship. The findings showed that there was a positive relationship between education and financial literacy. Individuals who had attained higher level of education tend to have positive attitude towards financial literacy because they usually set financial goals for their future (Atkinson & Messy, 2012).

Many investors think that investments can be done greatly with belief or awareness when financial discipline matters the most (Jim, 2016). He stated that there are four disciplines to financial success; a disciplined savings plan, a disciplined spending plan, a disciplined investment allocation plan and a discipline to rebalance. First, a disciplined plan is the ability of an individual to put money every month without fail for future usage. Second, a disciplined spending includes the ability of an individual to ensure that he or she spends less than the monthly income to avoid into huge amounts of debt.

Third, a disciplined investment allocation plan is having a well planned investment plan and having the discipline to stick to it. Fourth, discipline is needed to rebalance investment. It is common to have investments that will go up and down. Rebalancing investment will ensure that individual's portfolio is back to the original plan. Rebalancing leads to logical investment decisions. Jim (2016) emphasised that a lot of matters on getting ahead financially look simple but they cannot be done easily without the four disciplines.

Individuals need to have the willingness to change and develop new habits in order to develop financial discipline. Individuals with financial discipline will have a better finance situation like having more savings and build more financial security for them and their family (Cabler, 2016). Current young generation hardly have the discipline in practicing basic financial skills like budgeting, developing a plan for regular savings or long-term financial planning (Birari & Patil, 2014).

According to a study, individuals who have more discipline in financial planning will be financially secured and they will have a better future (Barron, 2014). In an online survey, he found that the overall financial discipline among Americans remains low with 36 % consider themselves as highly disciplined financial planner and almost 46 % are either informal planners or they do not plan at all. Psychological research discovered that calculating savings necessities and developing a solid saving plan with specific steps for retirement increase self-discipline (van Rooij, Lusardi & Alessie, 2009).

The above discussion on financial attitude clearly explained that the attitude of an individual contributes towards financial retirement planning. Positive attitude leads to good and wise retirement planning and negative attitude results in poor retirement planning. A survey done locally indicate that Malaysians admitted that they would prefer to spend their money rather than saving it up for long term. This clearly indicated that many Malaysians have negative attitude towards financial retirement planning. Therefore, there is an utmost important need to investigate on this issue to spread the awareness on the importance of financial retirement planning.

Financial Literacy Education. Financial education increases financial literacy of individuals. In this current era with ultimate financial crisis, it is essential for each and every individual to equip himself or herself with pertinent financial knowledge. Klapper and Panos (2011) carried out a study to figure out the effect of proper financial literacy education on retirement planning in Russia. They found that those who are exposed to financial literacy education and equip themselves with pertinent financial literacy education are good in planning for their retirement and investing in private pension funds for their future. Financial education does not start when one starts working; in fact, it should be exposed to the younger generation in schools.

Financial literacy education is useful in providing sufficient financial knowledge which aid in retirement planning (Ekerdt & Hackney, 2002; Ntalianis & Wise, 2011; OECD, 2012; Yoong, See, & Baronovich, 2012). However, a study on the role of financial literacy and financial education interventions in developing countries indicated that the outcomes in developing countries are mixed results. (Margherita, 2014). Many countries are developing the national financial education strategies and they invest more in the pertinent programmes (OECD, 2013).

Lusardi and Mitchell (2011) stated in their study on financial literacy education and planning that, attending a financial education programme for once is not sufficient for proper financial planning and making wise financial decisions. Individuals who are concerned about proper financial planning and practical financial decisions need to attend a number of financial education courses. Financial education courses increase financial literacy of households (Mahdzan & Tabiani, 2013). Financial education is not only emphasised for older adults but it would be also a great effort to expose the financial education to children and youth.

Walstad, Rebeck, and MacDonald (2010) carried out an investigation among 800 high school students to identify the effects of a financial education programme on their knowledge of personal finance. The finding indicated that with proper financial education, students can improve their financial knowledge very well. Policy makers claimed that to make proper financial decisions especially during the global monetary crisis period, financial education is the best solution (Fernandes, Lynch, & Netemeyer, 2014).

A survey in America has also found that those who have financial education are more likely to plan their financial matters effectively because they ask for assistance and advices from proper channels like retirement calculators, retirement seminars, and financial experts, instead of relying on their family or relatives or co-workers to plan their finances (Lusardi & Mitchell, 2011, p17). Financial education is the process of building knowledge, skills and attitudes to become financially literate. It introduces people to good money management practices with respect to earning, spending, saving, borrowing, and investing.

The role of financial education is to enable people to shift from reactive to proactive decision-making and work towards fulfilling their financial goals. By broadening people's understanding of financial options and principles, financial education builds skills to use financial products and services, and promotes attitudes and behaviours that support more effective use of scarce financial resources. When linked to the financial inclusion agenda the implicit (Cohen & Nelson, 2011). Existing empirical evidence shows that adults in both developed and emerging economies who have been exposed to financial education are subsequently more likely than others to save and plan for retirement (Bernheim et al., 2001; Cole et al., 2011; Lusardi, 2009).

In short, financial education is needed by every individual to enhance their financial literacy. Those who are exposed to financial education tend to have better financial literacy and they can plan their retirement very well. It is important to spread financial education in schools so that the younger generation get exposed to it since young and once they start working they can start planning for their retirement ahead of time.

Individuals can learn how to make thoughtful and informed financial decisions by figuring out opinions and ideas on his own, talk to his family, co-workers, friends, consult financial planner or attend financial courses. Thus, it is essential to conduct studies on financial education to figure out the relationship between financial education and retirement planning. The findings can be exposed to the public especially to the younger generation to help them in planning for retirement.

Summary

Overall, chapter two provides detailed information on literature reviews which are closely related to the field of financial literacy education and retirement planning. This chapter includes the previous studies on retirement, retirement age policy, retirement planning, financial literacy education, to work or to retire and also the contributing factors associated with retirement planning, The subsequent Chapter 3 (Methodology) includes a detailed explanation on the methodology used in this study.

CHAPTER 3

METHODOLOGY

Overview

This third chapter aims to provide in-depth details on techniques to conduct this study. This chapter provides a clear idea on how this study was planned and carried out in the fieldwork. Overall, the decision on research method is determined by the research questions and the types of data and/or understandings needed in responding to the research questions (Cohen, Manion, & Marrison, 2011). It includes two major parts of data collection methods; surveys and interviews. The purpose of this study is explained and the use of both quantitative and qualitative methods is explained as well.

The detailed explanation on survey questionnaires and semi-structured interview questions are explained in detail. The reliability and validity of the instruments are stated as well. Research population and the samples used in the study are specifically stated. Proper procedures of data collection and the proper ways of analyzing the collected data using descriptive statistics, logistic regression, cross-tabulations, multinomial logistic regression and interview are stated. In the end, the methodology chapter is summarized.

Purpose

The main purpose of this study is to identify the key determinants of financial literacy education affecting financial retirement planning. Financial retirement planning is crucial to elderly individuals in Malaysia. Therefore, it is essential to identify the key determinants of financial literacy education and educate Malaysians on the importance of these determinants in financial retirement planning. The importance of having financial literacy education before retirement is also explored as it contributes towards financial planning. Overall, for this study the research objectives are explored using two major parts; surveys and interviews. A systematic research methodology is needed in order to gather pertinent and valuable findings. Therefore, in this chapter detailed information is given on the research paradigm, research design, research instrument, identification of population and sample, methods for data collection and also the methods for analysing the collected data. The essential procedures to ensure the validity and reliability are also included in the research methodology.

Epistemology and Ontology Methodology

Research paradigm is a comprehensive system of interconnected practices and thinking about and conducting a research (Antwi & Hamza, 2015). Every research process consists of three major dimensions; epistemology, ontology and methodology. Researchers should be aware of philosophical assumptions as these enhance the quality of research.

According to Eddie (2012), most social science research fits into experimental (positivism) with a more ontology philosophy where the researchers think that reality is out there and they have empiricist epistemology philosophy where they think that they have to collect logical data to figure it out. Eddie (2012) also stated that social science research can also fit into postmodernist constructivism with a less realist ontology where they think that reality is just a load of competing claims and they have a constructivist epistemology mind set where they think that they need to analyse those competing accounts to explore further on the reality.

Generally there are two main approaches for carrying out educational research; quantitative and qualitative. Quantitative research paradigm focuses on hard and generalizable data and qualitative research paradigm emphasises on deep and rich observational data (Sieber, 1973). However, nowadays there is a need to use mixed method research paradigm as today's research becoming progressively interdisciplinary, difficult and more dynamic. Mixed methods research is the combination of quantitative and qualitative research techniques, methods, approaches, concepts or language in one study (Johnson & Onwuegbuzie, 2004).

This current study is a mixed approach research design that uses explanatory sequential design and it practices pragmatism. This research design consists of two sequential phases in one study (Ivankova, Cresswell & Stick, 2006). The first phase involves collecting and analysing quantitative data and then followed by second phase where it involves collecting analysing qualitative data to make the overall findings rich. In this study, researcher analysis is done mostly in a quantitative way and additionally qualitative approach is also used to support the findings.

Creswell (2012) said that explanatory sequential design is beneficial as initially the quantitative findings provide a general view of research questions and the qualitative data will enhance, strengthen or provide detailed explanation the general view. In this study, the researcher practices pragmatism as ontologically the researcher believes that the reality is out there and the reality cannot be determined by using either qualitative or quantitative research design. Epistemologically the researcher believes that she can be both objective and subjective in analysing the research questions and figuring out the reality using mixed method.

Unfortunately, there is an issue using mixed method research design. Using mixed method can be beneficial in many ways; however, it may be also difficult to maintain the integrity of each quantitative and qualitative approach (Bogdan & Biklen, 1998). In this study most of the research questions were analysed quantitatively and qualitative method was used to answer only one research questions. Thus, the researcher had to ensure that the integrity of both methods was maintained by providing rich data through interviews to support the findings derived from quantitative analysis.

Research Design

Creswell (2009) defined research design as a process which includes the combination of philosophy, strategies of inquiry and the specified methods used in a research to collect relevant data. Research design is an overall plan needed in carrying out a study. In addition, Creswell (2008) stated that for educational research, research design has been generally classified under three types; qualitative, quantitative and mixed methods. The research design for a study is selected based on research problems. This study is done mostly in a quantitative way; however, qualitative approach is also used to support the findings. Integration of both methods increases the confidence and the value of data in addressing the research objectives and research questions.

The main reason for using mixed methods research design is to draw from the strength and minimize the weaknesses of both quantitative and qualitative research designs in a single research (Johnson & Onwuegbuzie, 2004). Mixed method research design which acts as the third research paradigm combines both quantitative and qualitative research designs (Onwuegbuzie & Leech, 2004). This study was done using mixed method research approach.

Quantitative research is an approach used by researchers who want to test the objective theories by investigating the relationship among variables. Usually instruments like questionnaires are used to measure the variables and the numbered data will be analysed using statistics (Creswell, 2014). In this study, quantitative method like descriptive statistics like the distribution, inferential statistics like binary logistic regression, multinomial logistic regression and cross-tabulations were used to answer the research questions. In order to add more value to the findings, a group of participants were interviewed to answer the research questions as well.

Qualitative research is a method used by researchers who would want to collect information about certain matters in depth. Qualitative researchers believe that the answer to an objective or research question is obtained by collecting information from human subjects in-detail (Roller & Lavrakas, 2015). For instance, interview is used as an instrument in a qualitative study as the researcher interested to understand the living experience of respondents and the interpretation that they make on their experience.

In the first part, the researcher used two sets of survey questionnaires to identify the key determinants of financial literacy education and to identify the significant determinants of financial retirement planning. In the second part, the researcher used interview to provide in-depth information for the research questions and also to support the findings obtained through the survey questionnaires. Research problems can be understood better by using mixed method approach as it provides a rich data (Creswell & Plano Clark, 2007, p.5). Creswell (2012) stated that mixed method approach can increase the validity and reliability of research data.

Overall, two theories and four frameworks have been adapted to develop a financial retirement planning conceptual framework. The theories are theory of life-cycle saving and investing and theory of mental accounting. The referred frameworks are the Factors Affecting Well-being of the Elderly by (Yoong, See, & Baronovich, 2012, p.86), the National Strategy for Financial Literacy by (Financial Literacy and Education Comission, 2011, p.6), Model of Financial Literacy and Satisfaction in Malaysia. (Azwadi Ali, Mohd S.A. Rahman, &Bakar, 2013, p.320) and the Student Perceived Financial Well-being Model: The Final Structure Equation Model (Standardized estimates) by (Mohamad Fazli Sabri, Macdonald, Hira & Jariah Masud, 2010, p.94).

Survey (1ST & 2ND Cohort). One of the main purposes of first part of this study was to identify the key determinants of financial literacy education of elderly individuals in Malaysia. Then, the analysis was continued by the identifying the key determinants of financial planning of elderly individuals in Malaysia. This part of analysis was carried out based on quantitative method. A number of survey questions were developed for both of the surveys.

Both surveys were done in a quantitative manner and they were carried out by distributing sets of predetermined questions to a group of respondents (Blackstone, 2012). Survey method is one of the useful methods of collecting information from a very large group of respondents in a population. Quantitative method suited best in this part as the elements of financial literacy education among elderly were collected quicker and the responses from each respondent on his or her opinions on the determinants of financial literacy were analysed using descriptive statistics.

According to Creswell (2012) there are eight steps in conducting survey research. First step is to decide if a survey is the best design to use. Second step is to identify the pertinent research questions or hypotheses. Third step is to identify the population, the sampling frame, and also the sample. Fourth step is to determine the survey design and also the data collection procedures. Fifth step is to develop or locate an instrument. Sixth step is to administer the instrument. Seventh step is to analyse the data to address the research questions or hypotheses. Lastly, the eighth step is to write the report.

Figure 3.1 indicates the overall research flow of the first and second cohort of surveys. The research objectives aimed in the first and second cohort of surveys were stated specifically. Overall, the findings of the surveys were pertinent in providing relevant information regarding the key determinants of financial literacy education and retirement planning of elderly individuals in Malaysia. The first cohort of was also aimed in providing information concerning the significance of having financial literacy before retirement. The second cohort was aimed in providing in-depth findings on financial planning determinants.

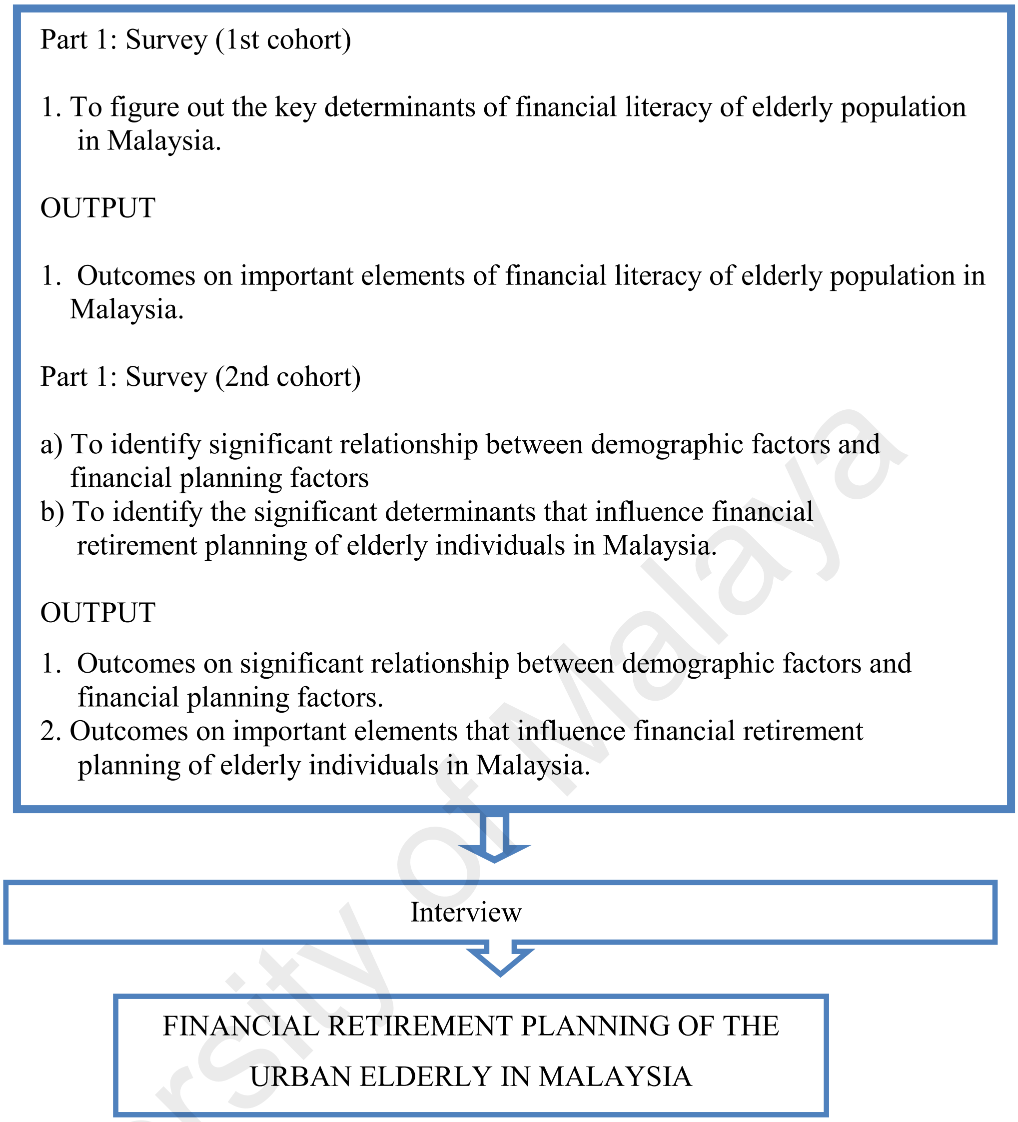

Figure 3.1 Research flow for Survey (1st & 2nd cohort)

Qualitative research. One of the methods to validate the quantitative findings is to use small-scale qualitative study (Cresswell, 2009). Qualitative researchers are able to comprehend and define the social phenomena in its natural settings (Angrosino, 2007). There are 6 essential characteristics of a qualitative research.

First of all, in qualitative research researchers play very crucial role in the research process (Angrosino, 2007). Secondly, in a qualitative research samples are chosen using purposive sampling to make sure that the variability common in the chosen social phenomenon is represented in the data (Maykut & Morehouse, 1994). Thirdly, Maykut and Morehouse (1994) also mentioned that the most suitable methods of data collection in a qualitative research are like observations, in-depth interviews, documents, and focused group interviews because the data in a qualitative research includes people's words and actions.

Besides that, there is a strong possible to reveal complexities in a qualitative research as the qualitative data collected by researchers provides thick description because of its richness and holism (Miles & Huberman, 1994b). Furthermore, at the early stages of a qualitative research essential factors of the study occur either by adding or eliminating questions, participants, instruments or changing the theoretical lens; thus a qualitative research has an emerging design (Maykut & Morehouse, 1994). Lastly, Miles and Huberman (1994b) state that the data in a qualitative research is interpreted by researchers by keeping in their mind the theoretical underpinnings.

In this study, the researcher chose qualitative research mainly to validate the quantitative findings (Creswell, 2012) and secondly is to get more in-depth data on the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia.

Interview. Qualitative method is used to elucidate further quantitative findings (Creswell, 2014). The quantitative findings of this study were validated through qualitative interviews. The main purpose of the interviews were to get valuable opinions from the group of elderly individuals on the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia.

Interview is prominent in social sciences and it is always the main method of data collection in a qualitative study (King & Horrocks, 2010). An interview is a conversation that takes place between an interviewer and an interviewee mainly to gather information of the real life situations and experiences of the interviewee on specific phenomena (Kvale, 1996). There are various ways to accumulate information from interviewees, of which the most common interviewing way is one-on-one (Alsshenqeeti, 2014). In this study, one-on-one interviews were conducted with participants to gather pertinent information on the impacts of several factors on financial retirement planning.

In this study, semi-structured interview was chosen to gather information from participants. One of the benefits in semi-structured interviews is, the researcher prepares a list of questions ahead of time or usually referred to as interview guide. This allows researcher to be prepared before the real interview sessions and researcher also can make sure that a core list of questions is asked during the interviews (Bryman, 2004). However, the researcher also has a bit of flexibility to do some amendments in the interview (Merriam, 2009). It allows the researcher to ask probing questions when needed (Merriam, 2009).

The other benefit is vital information is obtained through semi-structured interviews as the interviewer probes and expands the participants' responses and during interviews the participants have greater flexibility in how to respond to the interview questions (Rubin & Rubin, 2005). Another benefit of semi-structured interview is, the participants are given the chance to freely express their views using their own terms that they are familiar with (Cohen & Crabtree, 2006).

Thus, a list of interview questions with flexibility was constructed (see, appendix C) for data collection. The interviews were recorded by using two quality type recorders. The interviews then were transcribed into verbatim for analysis.

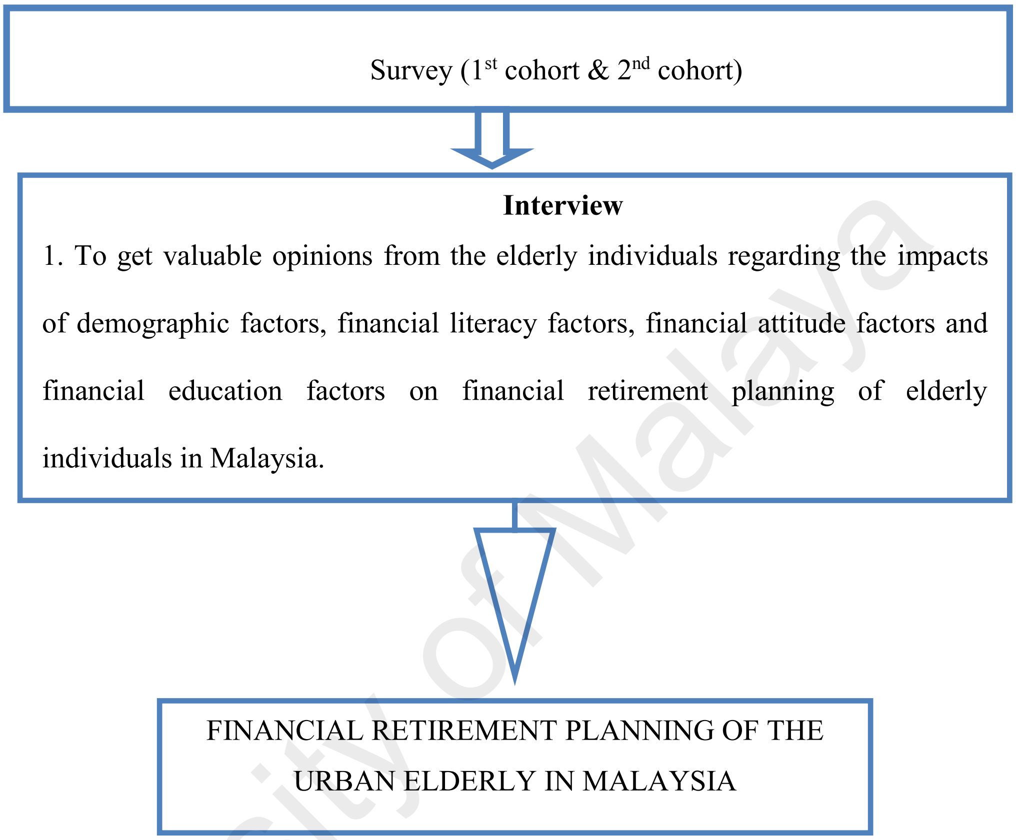

Figure 3.2 Research flow for Interview

Research Instrument

Survey (1st & 2nd Cohort). In the first part of this study, survey was chosen to figure out the key determinants of financial literacy education and financial planning of elderly population in Malaysia. Survey research was a way of measurement where the researchers use the standardized questionnaires as an instrument. In a survey research the measurement can be done through various ways like in-depth interviews, observations, content analysis and so forth (Vaus, 2014). Survey is usually done for a large group of people in order to find information on certain field of study.

Survey method cannot take place without statistical analysis. Survey is a technique of quantitative research method. Quantitative method is considered important in a research as the data is analysed statistically and the findings are reliable. It includes a systematic process; collecting, analysing, interpreting, and writing the findings of a study. The systematic process of a quantitative method also applies in both survey and experimental research (Creswell, 2014).

Usually surveys are distributed to a large number of respondents and they answer self-administrated questions either in papers or online. However, it is also common to carry out survey through interview. Interviewers are required to ask questions and record the answers accurately (Fowler, 2014). In quantitative survey interviews, the researchers refer to structured or semi structured interview questions where most of the questions are close-ended (Creswell, 2012).

In the first cohort, the survey consisted of 22 items which were closely related to financial literacy education (See Appendix A). The survey questionnaire consisted of direct questions related to socio-demographic details, relationship details, household information, education level, housing and neighbourhood information, asset, and income and expenditure details. The items emphasised on asset, and income and expenditure details. Table 3.1 shows the different items constructed for both pilot study and actual field work.

Table 3.1

Constructs, Elements and Number of Items in Questionnaire for Pilot Study and Field Work in Part 1: Survey (1st cohort)

Constructs		**Elements**	**Item for pilot study**	**Item for field work**
Part 1		• IC Number	1	1
Respondent's profile		• Name	1	1
		• Address	1	1
		• Telephone	1	1
Part II Socio-demographic information				
i.	Personal information	• Sex	1	1
		• Ethnicity	1	1
		• Religion	1	1
ii.	Relationship	• Marital status	1	1
		• Number of children	1	1
iii.	Household information	• House members	1	1
		• Age of house members	1	1
iv.	Education level	• Highest Education level	1	1
Part III Housing of neighbourhood information		• Household information	4	4
Part IV Asset, income and expenditure		• Expenditure and income	6	6
		TOTAL	**22**	**22**

In the second cohort, the survey consisted of 23 items (see Appendix B). It is designed with the guide from the findings of the preliminary study and literature review. The questionnaire consisted of 3 constructs; Respondent's profile, Socio-demographic information, asset and income and expenditure. Table 3.2 shows the different items constructed for actual field work.

Table 3.2

Constructs, Elements and Number of Items in Questionnaire for Pilot Study and Field Work in Part 1: Survey (2nd cohort)

Constructs		**Elements**	**Item for pilot study**	**Item for field work**
Part 1		• IC Number	1	1
Respondent's profile		• Name	1	1
		• Address	1	1
		• Telephone	1	1
Part II Socio-demographic information				
i.	Personal information	• Sex	1	1
		• Ethnicity	1	1
		• Religion	1	1
ii.	Relationship	• Marital status	1	1
		• Number of children	1	1
		• Place of residence	1	1
iii.	Household information	• Living alone	1	1
		• House members	1	1
		• Relationship	1	1
Part III Asset, income and expenditure		• Expenditure and income	6	6
		• Retirement planning	6	6
		TOTAL	**23**	**23**

Interview. As mentioned earlier in this chapter, interviews were chosen to be reliable and valid method of collecting findings in the second part of this study. Interviews were aimed to provide rich data for particular issues in various studies (Ida Fatimawati, 2012). In this study, this part was aimed to probe, describe and elucidate the impact of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia from a group of elderly individuals. They were chosen based on several criteria.

Semi-structured interviews were carried out among the 10 participants in order to get in-depth details about the impacts of a number of factors of financial literacy education on financial retirement planning of elderly individuals in Malaysia. Interviews were conducted to collect detailed insights from participants individually (Gill, Stewart, Treasure & Chadwick, 2008). Interview acts as the best tool to uncover the meaning of phenomenon by collecting details from experts based from their experiences (Corbin & Strauss, 2008; Merriam, 2009). It is believed that interview is a better way to seek for complex and/or emotionally laden information (Connaway & Powell, 2010). Throughout the interview session, the participants were given the chance to share out their opinions and ideas based on their level of expertise and experiences. The interview was structured into seven parts and the parts are shown in Table 3.3. Interview protocol is attached in Appendix C.

Table 3.3

5 Parts in the Interview

Interview structure	Components
Part I Introduction	· Brief explanation of the study and interview · Explain on the rights of participants · Provide consent form to read and to Sign · Identity participants' profession and their job background
Personal background	·Identify participants' personal experience in dealing with financial situation · Identify if participants have any financial planning for retirement before they retire
Part III Financial retirement planning in Malaysia	· Figure out when they realised the importance of planning their finance for retirement · Figure out the effects of mastering financial literacy in planning for retirement
Part IV Determinants of financial planning	· Identify the impacts of demographic factors, financial attitude factors, financial literacy factors and financial education factors on financial retirement planning
Part V Challenges	· Identify on how to channel the conceptual model to Malaysians · Figure out the possible challenges/difficulties by higher authority and policy makers in implementing the conceptual model
Part VI Other determinants	· Identify other determinants that can affect financial retirement planning
Part VII Closing	· Clarify any queries · Recap the whole interview session · Confirm time for second interview if needed

Validity and Reliability

The quality of a research depends on two important elements which are the validity and the reliability criteria of the study. If findings in a study are not collected using valid and reliable instruments, the quality of the study is questionable. Researcher's first priority is to ensure that the data of the study is valid and reliable. Validity shows how great a test carried out in a study measures what is supposed to be measured (Best & Kahn, 1993). The data collected in a study is considered valid when it could represent the phenomenon that a research would want to measure (Reis & Judd, 2000).

Reliability is also as equally important as validity. Reliability means consistency in the scores of a single measure and it would be better to test for reliability through repeated applications of the same measure (Bailey, 1994; Trochim, 2006). It simply means the consistency and the stability of findings when the study is carried out under the same circumstances. The same findings indicate that the research is a strong and good and others can accept the findings. Reliability does not guarantee the validity of findings in a study; but, it is it considered as a necessity for validity (Mitchell & Jolley, 2013).

Validity and Reliability for Survey (1st & 2nd cohort). As stated earlier, the instrument used in this study for part one is survey. In the first cohort, the survey was carried out using face-to-face interview among 1239 elderly individuals aged 55 and above and in the second cohort, the survey was carried out using face-to-face interview among 623 elderly individuals aged 55 and above. 2 sets of questionnaire which consist of close-ended questions were used in this survey. The development of survey questionnaire was done in collaboration with a team of external experts from University of Malaya and they are selected based on their experience in the field of finance and therefore, the items in the questionnaire were validated by them. They vet the items in the questionnaire to ensure the content and construct validity of the questionnaire.

Reliability of a questionnaire is affected by three most crucial factors; first, the total number of items in a questionnaire, the quality of the questions, and the suitability of the questionnaire to respondents who are being studied (Shiken, 1977). The number of items used in the questionnaire for the survey was less, however the quality of the items were assured as they were adapted from valid sources. Besides, the items designed in this questionnaire were suitable for the elderly individuals who participated in this study.

In a pilot study, Cronbach's alpha is a well-known measure of reliability test. It is commonly used to test reliability for multiple Likert questions in a survey or questionnaire (Laerd Statistics, 2013). The sets of questionnaires used in this present study consisted of one Likert Scale question and mostly were multiple choice questions. Thus, Cronbach Alpha could not be performed to check the reliability. Pilot study was carried out among 30 respondents before the real field work was carried out. They were given 30 minutes to complete the survey. They were given the chance to withdraw from the pilot study anytime and they were asked not to answer any questions they were not comfortable with.

Several respondents found that question number 4 in Part 4 on asset, income and expenditure was vague. Thus, to ensure the validity of the question, it was edited by adding several examples. Initial question was, 'What is the minimum amount that you need every month?' The corrected version was, ' What is the minimum amount that you need each month for living expenses and others such as paying instalments, tuition fees for children, medical bills, etc. The rest of the questions were clear and answerable as the questions were validated a by a team of experts and adapted from valid sources.

Validity and reliability interview. In qualitative approach, the concept of trustworthiness is given utmost importance (Merriam, 2009). In this study, the interview questions were self-administrated by the researcher based from past studies and the questions were validated by two experts from a public university in Kuala Lumpur who have also conducted studies and published papers on ageing. The researcher also asked a language expert who is a university lecturer who has been teaching English language for the past 20 years to validate the questions to check the grammar and sentence structure.

Pilot test has been carried out to ensure the validity and reliability of the questions in the interview protocol used for the interview. The interview protocol was validated by two experts to ensure its validity. Preliminary study has been carried out among 5 elderly individuals who were aged 55 and above. Preliminary study is essential to check the reliability of the interview protocol and pertinent corrections can be done before carrying out in real field. Besides, researcher could also improve on interviewing skills in order to get quality data from the participants.

5 participants from various race, education background, and income were interviewed. They gave sharing and information based on their background. Feedback from the 5 participants indicated that the responses for question 4 were not so valid for the study because the question focused generally on retirement planning. Thus, the question was edited by adding the term financial retirement planning and probes related to financial retirement planning were added to ensure that the respondents give accurate answers for the model evaluation.

Research Population and Samples

Survey (1st & 2nd cohort). There are two main aims of this part; first, is to gather information on the key determinants of financial literacy education of elderly individuals in Malaysia which contribute towards financial planning for retirement and second, is the gather information on the key determinants of financial planning of elderly individuals in Malaysia. Urban elderly in most countries face more challenges in planning their retirement due to rapid economic growth and increased amount of expenses. For instance, in Kazakhstan individuals from urban area agreed that financial support of the household is the most crucial (40.8% indicated such problems as inflation; high food prices; high prices, in general; and low income). In contrast, for individuals who live in rural areas indicated that only 8.2% of them experience such problems (Shedenova & Beimisheva, 2013).

In Malaysia, the urban population increased from 10.2 million (43% of the total population) to 15 million (53%) resulting in more urbanized country (The World Bank, 2015). This results in higher proportion of the aged population in the urban than the rural area (Mafauzy, 2000). Financial planning for retirees is mainly related to urban economics as it will aid the policy makers to address the retirement income shortfall and it is least important for rural areas because they do not compete with the rapid changes of economy as they can maintain their daily needs easily because many of them grow their own food on their family land (Kock, 2015). Thus, the focus of this study is on urban elderly.

As this study focuses on the urban elderly, the target population for the first cohort is the elderly individuals with different kind of characteristics such as gender, race, religion, education level and so on from Klang Valley. Klang Valley is the largest urban centre in Malaysia (World Population Review, 2017). There are two groups of elderly individuals in this study; first, Melor Electoral (ME) respondents and second, Melor Volunteer (MV) respondents. ME respondents are individuals who are chosen for the study based on electoral roll while MV respondents are those who volunteer themselves to take part in this study.

Table 3.4

ME and MV respondents in Part 1: Survey (1st & 2nd cohort)

	1st cohort	2nd cohort
ME respondents	907	473
MV respondents	332	150
Total	**1239**	**623**

Sample size. Sample used in a study represents the population. Latham (2007) defined sample method as taking a representative selection of the population and using the data collected as research information. Thus, the sample used in this study represents the whole population of elderly in Klang Valley. The use of simple random sampling is meant to be unbiased representation of a group (Witte, Meyer & Martell, 2001). Biasness can be avoided because in simple random sampling there is an equal probability of selection for all elements in the population (Ross, 2005). In the first cohort, the sample chosen to conduct the survey was 1239 elderly individuals.

The sampling size for the second cohort is expected to reduce due several factors; invalid addresses of respondents, deceased respondents, respondents shifted to new residences, refused respondents and rejected respondents. The sample chosen to conduct the survey in the second cohort is reduced approximately 50 per cent due to expected attrition rate. Therefore, total number of respondents was 623.

Sample criteria. There were specific criteria used in choosing the sample for this study. Therefore, the elderly individuals were chosen based on the following inclusion criteria:

(i) Aged 55 and above;

(ii) Born in or before 1958;

(iii) Live in Klang Valley

The exclusion criteria of respondents:

(i) Those who are bedbound;

(ii) Those who are unable to answer questions verbally or unable to Communicate for example sufferers of severe dementia or those who have a severe speech disability.

Interview. This part is essential because the a group of elderly individuals who have experiences in dealing with financial matters in planning for their retirement are required to share their opinions based from their experiences on the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia. The population of this part covers all the elderly individuals from Klang Valley.

Sample size. The decision on sufficient sample size for research is closely related to concept of saturation (Marshall, Cardon, Poddar & Fontenot, 2013). In a qualitative study which uses interviews as the primary data source, data is collected by the researcher from respondents until it gets saturated where by at a point of time nothing new is being added from respondents (Bowen, 2008; Miles & Huberman, 1994a).

At that point of time there is no need for additional respondents. In addition, fewer participants are needed for interview in studies which include more than one method (Lee, Woo & Mackenzie, 2002). Since the purpose of the second part of this study is to validate the quantitative findings with qualitative interviews, the decided number of participants used for interview was 10 participants who have experience in dealing with financial planning for retirement. Purposeful sampling is used to select the participants for interview as the researcher specifically has selected participants and the locations to learn and understand the impacts of several determinants on financial retirement planning. Purposeful sampling is used in qualitative sampling as the researcher intentionally chooses individuals and locations to learn or understand the central phenomenon (Creswell, 2012).

Sample criteria. Since this method involves qualitative method; interview, the findings are expected to be rich and in-depth. In order to provide rich and pertinent opinions on the financial retirement planning model, the participants were chosen based on any of the criteria below:

(i) Retirees;

(ii) Aged 55 and above;

(iii) Worked in the field of finance for more than five years;

(iv) Has conducted financial planning courses;

(v) Financial planner or advisor or an accountant;

Data Collection Procedures

Survey (1st & 2nd Cohort). The data collection for the first and second cohort of survey was done under a big government project, Malaysian Elders Longitudinal Research (MELOR). It is a national research study conducted by

University of Malaya to study on the current issues faced by elderly individuals. The project is a collaboration of multiple faculties of University of Malaya. Approximately 30 research assistants were appointed by the project heads to carry out survey among elderly individuals in Klang Valley and the researcher of this study was one of the research assistants who was involved in the field work.

The whole process of finding data for this study started from the first cohort of survey. This cohort was carried out using survey. As mentioned earlier the respondents chosen for the survey were from Klang Valley. A formal letter from University of Malaya was sent to the director of corporate and user services division, department of statistics Malaysia to get permission to select respondents randomly from the electoral roll (Suruhanjaya Pilihan Raya Malaysia, SPRM, 2014). Total details of 10, 500 respondents were given. From the main list, 8762 respondents were chosen for the study due to age limit. Then, letters were distributed to all the respondents.

However, only 1239 respondents were included in the survey. Others were excluded from this survey for reasons like invalid addresses, moved away, refusal, severe illnesses and also deceased. Researcher read out the survey questions to the respondents to figure out the responses from the respondents. The researcher had to read the questions as many respondents who are old find difficulties to read and understand the questions on their own. Brief explanation was given to the respondents about the survey and consent form (see Appendix D) was also given to the respondents before the interview took place. The interviewer took down the responses from the respondents accurately and keyed in the data in tablet. Each interview took approximately an hour.

In the second cohort of survey, same method of gaining information was used. The respondents involved for the first cohort were followed up for the second cohort. In second cohort, different set of questions were asked to the respondents. The same procedures took place before the interview took place. The respondents were explained about the study and the purpose of the survey and then they were asked to read and sign consent form (see Appendix C). Then, the research assistant read out to them the questions and keyed in the data in tablet. The interview in the second cohort took approximately forty five minutes.

Interview. To validate the quantitative findings, semi-structured interviews were chosen to collect information about financial retirement planning. Semi-structure interview consisted of a set of key questions and it followed a more open-ended manner so that the researchers can allow themselves to have an open view about the contours of what they need to find out (Bryman, 2012). Before conducting semi-structured interviews in fieldwork, an interview protocol was developed (see Appendix D). Questions were developed based on the research questions, research objectives, and review of the literature.

Participants were contacted for the interviews. The participants were allowed to choose convenient locations for interview sessions (i.e., participant's house, participant's office and restaurant). The interviews were conducted in English. Before interview took place, the participants were briefed verbally about the study, in addition to earlier given information. The participants were informed about their rights as participants and they were asked to read and sign consent form (see Appendix E).

The researcher sat facing the participants and the conversations were recorded using voice recorder upon their agreement and later the conversations were transcribed for analysis purpose. After each interview, the recordings were transferred to researcher's personal laptop to ensure that the data was secured and participants' confidentiality was protected.

In this study, the interview sessions ranged between 30 minutes to 80 minutes. Throughout the interviews, researcher attempted to make the participants comfortable when responding to the questions with guiding questions to make sure that the information needed on financial retirement planning wass obtained from them.

Data Analysis Procedures

Survey (1st & 2nd cohort). In the first cohort, survey items used in the interview were analysed quantitatively using descriptive and inferential statistics in Statistical Package for the Social Sciences (SPSS) version 22. Inferential statistics, binary logistic regression was used to identify the key determinants of financial literacy of elderly population in Malaysia.

Logistic regression was used in the first cohort because the dependent variable was dichotomous (two category) variable. The measurement of the dependent variable was done by identifying if the respondents have the ability to manage expenditure or not. The independent variables were demographic factors, financial attitude factor and financial education factor.

The main objective of using logistic regression was to predict group membership. Results of the analysis were interpreted from the odds ratios. This method was also useful to figure out the strengths of the relationships among the variables which were analysed (Burns & Burns, 2008; Hair, Black, Babin, Anderson, & Tatham, 2006). Since the dependent variable has only the values of 0 and 1, the predicted probability (p) must be bounded within the range of 0 and 1. Figure 3.3 indicates the usage of logistic curve to represent the relationship between independent variable and dependent variable.

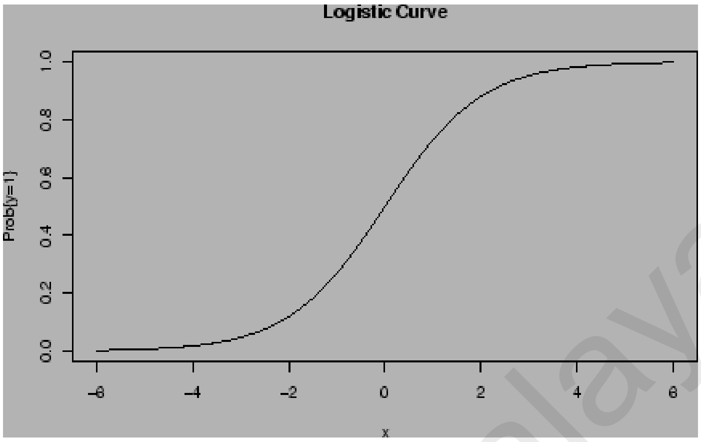

Figure 3.3 Logistic Curve. Adapted from *The logistic curve*, by R. Brant,2004.

The log information of the p values to a log distribution produces a link with the normal regression equation. The log distribution or logit (p) is the log (to base e) of the odds ratios that the dependent variable is 1. It is defined as:

$$logit\ (p) = \log\left[\frac{p}{1-p}\right] = ln\left[\frac{p}{1-p}\right]$$

The form of the logistic regression equation is:

$$logit\ (p) = \ [p(x)] = \log\left[\frac{p(x)}{1-p(x)}\right] = b_0 + b_1 + x_1 + \dots + b_n x_n$$

where b = the coefficient of the predictor variables.

The Maximum Likelihood approach is taken to estimate the model parameters of a logistic model (Klein, Kupper, & Muller, 2008). This procedure is run iteratively to find the most likely estimates for the coefficients until the model has converged.

The probability p, can be calculated with the formula:

$$p = \frac{\exp(b_0 + b_1x_1 + b_2x_2 + _{...})}{1 + \exp(b_0 + b_1x_1 + b_2x_2 + _{...})}$$

where *b* = the coefficient of the predictor variables, *exp* = the base of natural logarithms.

Assumptions of logistic regression (Statistics Solutions, 2016):

1) It does not need a linear relationship between the dependent and independent variables. Logistic regression can handle all sorts of relationships, because it applies a non-linear log transformation to the predicted odds ratio.
2) The independent variables do not need to be multivariate normal – although multivariate normality yields a more stable solution. Also the error terms (the residuals) do not need to be multivariate normally distributed.
3) Homoscedasticity is not needed. Logistic regression does not need variances to be heteroscedastic for each level of the independent variables.
4) It can handle ordinal and nominal data as independent variables. The independent variables do not need to be metric (interval or ratio scaled).

In logistic regression, the Omnibus Test of Model Coefficient is commonly used to diagnose a model. The overall model is statistically significant if the chi square is significant (Burns & Burns, 2008). The Hosmer and Lemeshow Test is used to indicate how good a model is. There is no difference between the observed and model predicted values if the *p*-value is not significant. A model is not accepted if the p-value is below some specified α level (say, .05) (Allison, 2014).

The process also involved descriptive statistical analysis of data which include frequency, percentage, mean, and standard deviation. Descriptive statistics was used to describe the profile of respondents according to (1) demographic factors, (2) financial attitude factors, and (3) financial education factors. Binary logistic regression was used to identify the importance of having financial literacy education before retirement as it contributes to financial retirement planning for the urban elderly individuals in Malaysia.

In the second cohort, survey items were analysed quantitatively using descriptive, cross-tabulation and inferential statistics in Statistical Package for the Social Sciences (SPSS) version 22. Inferential statistics, multinomial logistic regression was used to identify the determinants of financial planning of elderly individuals in Malaysia.

Seven financial planning variables were included in the cross-tabulation analysis of the second cohort of survey. Further analysis was done to indicate financial planning variables (asset_ownership, comfortable retirement, duration_savingtolast, estimation_retrmntsaving, financial planning ways, five year financial situation and monitor_spending) by age, gender, ethnicity and education level. In the second cohort, cross-tabulation was used to describe the relationships between two categorical variables and in a cross-tabulation; each variable determines the rows and the columns of the table. The cells in each table consists of the amount of a specific combination of categories occurred (Kent State University Library, 2016). In an analysis, if the assumptions are met, a chi-square test in cross-tabulation is done to check if the association between the variables is statistically significant (van den Berg, 2015).

Significant differences of ($p < 0.05$) is reported when there is at least a small effect size. The effect size is important to comprehend if the differences are meaningful as statistically significant differences are more likely to occur with large sample size. The sample size in this cohort was 623 and it was considered large; thus, chi-square test is done and the effect sizes are phi (Φ) or Cramer's V (USGC, 2016).

Phi is used to measure association between variables. The value of Phi is usually less than one. When chi-square value is large, indicating a strong relationship between two variables, the Phi will be also large. Larger values of Phi indicate stronger relationships between variables and small values of Phi indicate weaker relationships between variables (Gingrich, 2004).

Cramer's V is used to compare the strength of association between any two cross classification tables. Regardless of the dimension of the table or the sample size of a study, Cramer's V equals 0 when there is no relationship between the two variables, and generally has a maximum value of 1. Larger values indicate a strong relationship between the variables and smaller values indicate a weaker relationship (Gingrich, 2004).

Multinomial logistic regression was used to analyse the data in the second cohort. Logistic regression was used to analyse relationship between a dichotomous dependent variable and metric or dichotomous independent variables and this analysis is used to describe data and to explain the relationship between one dependent binary variable and one or more nominal, ordinal, interval or ratio-level independent variables (Statistics Solutions, 2016). It is also possible to use logistic regression to analyse the relationship of more than two categories and it is called multinomial logistic regression (Field, 2013).

The multinomial logistic regression model is used when the dependent variable (DV) has more than two nominal (unordered) categories (Karen, 2017). In this study, the DV was Budget_Spending which was categorized into three categories; often, occasionally and never. All the three categories were analysed to see their relationship with 15 independent variables (IV) comprising demographic levels factors, financial literacy level factors, financial attitude level factors and financial education level factors.

The predictive success of the logistic regression is assessed by looking at the classification table, the goodness of fit tests like the likelihood ratio tests are available as the indicators of model appropriateness and the wald statistic to test the significant of IV.

This study includes 15 explanatory variables, therefore the initial model for log odds is

$$\textit{Logit}\,[P(Y=1)] = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \beta_9 x_9 + \beta_{10} x_{10} + \beta_{11} x_{11} + \beta_{12} x_{12} + \beta_{13} x_{13} + \beta_{14} x_{14} + \beta_{15} x_{15}$$

where;

x_1 is Age
x_2 is Gender
x_3 is Ethnicity
x_4 is Marital Status
x_5 is Education Level
x_6 is Ownership of Assets
x_7 is Source of Income
x_8 is Minimum Monthly Expenses
x_9 is Dependency
x_{10} is Financial Status

x_{11} is Comfortable Retirement
x_{12} is Duration Savings to Last
x_{13} is Estimation Savings for Retirement
x_{14} is Monitor Actual Savings
x_{15} is Financial Planning Ways

And the alternative formula, directly specifying $\pi(x)$, is

$$\pi(x) = \frac{exp\begin{pmatrix} \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 \\ +\beta_9 x_9 + \beta_{10} x_{10} + \beta_{11} x_{11} + \beta_{12} x_{12} + \beta_{13} x_{13} + \beta_{14} x_{14} + \beta_{15} x_{15} \end{pmatrix}}{1 + exp\begin{pmatrix} \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 \\ +\beta_9 x_9 + \beta_{10} x_{10} + \beta_{11} x_{11} + \beta_{12} x_{12} + \beta_{13} x_{13} + \beta_{14} x_{14} + \beta_{15} x_{15} \end{pmatrix}}$$

where;

β_i is the effect of x_i on the log odds that $Y = 1$, controlling other x_j
exp(β_i) is the multiplicative effects on the odds of one unit increases in x_i, at fixed levels of other x_j.

As stated earlier, this study has 623 independent observations with 15 IV, and the DV has three categories. In order to construct the logits in the multinomial case, one of the categories must be considered the base level and all the logits are constructed relative to it.

Let π_j denote the multinomial probability of an observation falling in the jth category, to find the relationship between this probability and the 19 IV, the multiple logistic regression model then is

$$log\frac{\pi_j(x_i)}{\pi_k(x_i)} = \begin{matrix} a_{0i} + \beta_{1j} x_{1i} + \beta_{2j} x_{2i} + \beta_{3j} x_{3i} + \beta_{4j} x_{4i} + \beta_{5j} x_{5i} + \beta_{6j} x_{6i} + \beta_{7j} x_{7i} + \beta_{8j} x_{8i} \\ +\beta_{9j} x_{9i} + \beta_{10j} x_{10i} + \beta_{11j} x_{11i} + \beta_{12j} x_{12i} + \beta_{13j} x_{13i} + \beta_{14j} x_{14i} + \beta_{15j} x_{15i} \end{matrix}$$

where j = 1,2, i = 1,2,3,…., 623. Since all the π's add to unity, this reduces to

$$\log[\pi_j(x_i)] = \frac{exp\begin{pmatrix} a_{0i} + \beta_{1j} x_{1i} + \beta_{2j} x_{2i} + \beta_{3j} x_{3i} + \beta_{4j} x_{4i} + \beta_{5j} x_{5i} + \beta_{6j} x_{6i} + \beta_{7j} x_{7i} + \beta_{8j} x_{8i} \\ +\beta_{9j} x_{9i} + \beta_{10j} x_{10i} + \beta_{11j} x_{11i} + \beta_{12j} x_{12i} + \beta_{13j} x_{13i} + \beta_{14j} x_{14i} + \beta_{15j} x_{15i} \end{pmatrix}}{1 + \sum_1^2 \begin{pmatrix} a_{0i} + \beta_{1j} x_{1i} + \beta_{2j} x_{2i} + \beta_{3j} x_{3i} + \beta_{4j} x_{4i} + \beta_{5j} x_{5i} + \beta_{6j} x_{6i} + \beta_{7j} x_{7i} + \beta_{8j} x_{8i} \\ +\beta_{9j} x_{9i} + \beta_{10j} x_{10i} + \beta_{11j} x_{11i} + \beta_{12j} x_{12i} + \beta_{13j} x_{13i} + \beta_{14j} x_{14i} + \beta_{15j} x_{15i} \end{pmatrix}}$$

For j= 1,2, the model parameters are estimated by the method of ML (Multinomial Logistic).

(Abdalla, 2012)

Multinomial logistic regression components. Creating dummy coding is one of the most important criteria in Multinomial Logistic Regression Model. Dummy coding is created for all the variables which are included in the analysis. If a variable has M categories, there will be M-1 dummy variables (Karen, 2017). The dummy variable for every category has a value of 1 for its category and a 0 for all others. If a variable has only one category, the reference category does not need its own dummy variable.

The baseline category must be chosen first before proceeding with further analysis (Field, 2013). The baseline category is chosen based on the frequency of the Dependent Variable (DV). Reference category will be the value with highest frequency (Institute for Digital Research and Education, IDRE, 2017). Model fitting is essential in Multinomial Logistic Regression. There are two components in model fitting; model and -2(Log Likelihood). The parameters of the model for which the model fit is calculated is indicated in model (Kutner, Nachtsheim & Neter, 2008).

"Intercept Only" describes a model that does not control for any predictor variable and simply fits an intercept to predict the outcome variable and "Final" describes a model that includes the specified predictor variables and has arrived at through an iterative process that maximises the log likelihood of the outcomes seem in the outcome variable (Kutner, Nachtsheim & Neter, 2008). Log Likelihood in model fit is used to test if all the regression coefficients of the predictors in a model are simultaneously zero and in tests of nested models and the higher the value of log likelihood, the better the model is (Minitab, 2016).

Parameters Estimates of the Coefficients represents the change in the response which are related with a one-unit change of the predictor, all other predictors being held constant (Analyse-it, 2017). Wald test in this analysis is essential as it tests the significance of IV in a model (Kyngas & Rissanen, 2001). If the Wald test is significant for a particular IV, then it can be said that the parameters related with the particular IV is not zero and the variable should be included in the model. In contrast, if the Wald test is not significant then the variable can be excluded from the model. This Wald chi-square tests the null hypothesis that the estimate equals zero.

In this analysis, Pseudo R-Square (R^2) consists of 3 pseudo R-squared values; Cox and Snell, Nagelkerke and McFadden. Larger R^2 shows that more of the variation is explained by the model, to a maximum of 1 as R^2 summarizes the proportion of variance in the DV associated with IV (IBM, 2017). Smith and McKenna (2013) analysed 7 types of pseudo R^2 used in logistic regression which included Cox and Snell, Nagelkerke and McFadden. By comparing these pseudo R-squared values, Cox and Snell is better since it has the lowest mean compared to Nagelkerke and McFadden.

The Cox and Snell R^2 is

$$R^2{}_{MCS} = 1 - \left(\frac{L_{Null}}{L_{Full}}\right)^{\frac{2}{n}}$$

where n is the sample size and $R^2{}_{MCS}$ is interpretable as the geometric mean square improvement. L(*Null*) and L(*Full*) are the likelihood functions for the intercept-only model and full model,

respectively.

Descriptive statistical analysis of data was used and it included frequency, percentage, mean, and standard deviation. Descriptive statistics was used to describe the profile of respondents according to (1) demographic factors, (2) financial literacy factors, (3) financial attitude factors, and (4) financial education factors.

Interview. Interview is used to collect data to validate quantitative findings. Data analysis in qualitative research involves the process of "systematically searching and arranging interview transcripts, field notes and other materials that the researcher accumulates to enable you to come up with findings" (Bogdan & Biklen, 2007, p. 159).

Qualitative data analysis is also nonlinear and it is a complex process that moves throughout the research from concrete to abstract, inductive to deductive reasoning, description and interpretation and vice versa (Merriam, 2009). Data analysis is done to convert raw data into findings and conclusions (Lofland et al., 2006). In qualitative method, the data collection and analysis take place simultaneously from the first day of data collection (Merriam, 2009; Miles & Huberman,1994b). Interviews are conducted and the collected data is associated, summarized, and interpreted to make sense of them (Merriam, 2009).

Thematic analysis is used to interpret the data collected in this study according to the thematic analysis method defined by Braun and Clarke (2006) and Merriam (2009). Braun and Clarke (2006) stated that thematic analysis is the most commonly used qualitative analysis method. They explained that it is a manageable and theoretically flexible approach which is used to analyse qualitative data. In the data analysis process, the researcher will identify relevant themes (patterns) which are related to the research questions (Merriam, 2009). Then followed by data analysis and developing a report based on the identified themes in order to answer the question (Braun & Clarke, 2006).

Braun and Clarke (2006) also mentioned that several critical choices are needed in thematic analysis before beginning the analysis process. These choices are beneficial in guiding the overall analysis process. First of all, the choice is made based on rigidity and flexibility in considering the themes. The identification of themes in thematic analysis should be flexible; however, the researcher should be able to relate it to the research question.

Then, the researcher should make the choice if the analysis will be inductive or theoretical (deductive) thematic analysis needs to be made. Inductive thematic analysis includes rich description of data. The themes identified have little connection to the questions asked during data collection. In inductive thematic analysis, there is no pre-existing coding frame because upon collecting data, new themes will emerge. On the other hand, theoretical (deductive) thematic analysis is derived based on researcher's theoretical interest in the area. The description of data is less rich as whole but more a detailed analysis of interested aspect of the data.

Besides that, the researcher also needs to make choice between semantic and latent themes. Semantic themes are identified by the researcher within the explicit or surface meanings of the data based on the analysis of information mentioned by the participants and written in documents and not looking at anything beyond that. In contrast, latent themes are identified by the researcher upon examining the underlying ideas, concepts, assumptions, and ideologies and not by merely describing superficially. Based on the above choices, this current study is a flexible, inductive and semantic thematic analysis.

Steps of Data Analysis. Braun and Clarke (2006) proposed six phases of analysis that will also be used in thematic analysis; familiarization with data, generalization of initial codes, theme formation, reviewing themes, defining and naming themes and report writing. In this study, the researcher analysed the qualitative data using the six phases.

First phase is familiarization with data. In this phase researcher becomes the instrument whereby she becomes an active respondent in the research process (Hammersley & Atkinson, 1995). The analysis and findings in qualitative method are deeply descriptive (Merriam, 2009). The data analysis started with data collection and the researcher emerges herself with data. The researcher recorded the responses using a voice recorder and notes were taken down. Once the interviews were done, she transcribed interviews in written forms and she familiarised herself with data by critically analysing the interview transcripts.

During the transcribing process, participants' names were replaced with codes. Coding in interview is vital in ensuring the confidentiality of participants' identities and retrievability of interview data ("Protecting Confidentiality & Anonymity", 2017). In this study, the codes for the participants were Participant 1, Participant 2, Participant 3, Participant 4, Participant 5, Participant 6, Participant 7, Participant 8, Participant 9 and Participant 10.

Then, the researcher reads interview notes, observation notes and written documents three times, line-by-line to get the exact meaning and to avoid misunderstanding and misinterpretation. In this first phase, the researcher generated the initial list of ideas for coding.

Second phase is generalisation of initial codes. The process was continued with coding of data into meaningful segments. In this phase, all the collected data was coded accordingly. According to Merriam (2009), 'Open coding' was done at this stage because every bit of data which appeared to be valuable was chosen. Then, all the written documents were read once again and the pertinent texts were chosen and labelled. Meanwhile, the data was categorized into meaningful groups according to interesting aspects in the data items.

Third phase is theme formation. In this phase, all the codes which were generated earlier were reanalysed and the similar codes were combined to develop potential themes. In order to develop themes, the repetitive words and coding were examined and collated together. Initially, the researcher developed major themes and then later on the themes were reanalysed and they were merged together under one main theme and others may be divided into sub-themes or new themes were developed. Cresswell (2012) suggested that by reanalysing and merging the themes, the number of themes will be lesser.

Fourth phase is reviewing themes. The researcher reviewed the codes in the theme to ensure the correct coding and coherence among the codes. The researcher also reviewed the themes to make sure that the information in each theme was relevant and there was no repetition of discussion in other themes. Fifth phase is defining and naming themes. In this phase, the researcher named the themes and analysed each theme. The researcher wrote up for each theme kept in mind the research questions. The sixth phase is report writing. In this phase, researcher wrote concise and logical themes. The discussion for each theme was supported with the interview excerpts from the interviews.

Summary

Overall, chapter three provides an overview of the methodology of this study. This chapter includes research design, research instrument, research population and samples, data collection procedures, and data analysis procedures. The following Chapter 4 (Findings) includes a comprehensive overview of all the findings from the first part and second part.

CHAPTER 4

FINDINGS

Overview

This fourth chapter is vital as the findings for this study are presented in this chapter. As explained in the earlier chapters the main aim of this study is to identify the key determinants affecting financial retirement planning for the urban elderly individuals in Malaysia. The following paragraphs provide an in-depth explanation on the findings for the two major parts in this study; part one is survey and part two is interview. Both quantitative and qualitative aspects of research designs are used to design research instruments for this study.

The main objective for the first cohort of survey in first part is to identify the key determinants of financial literacy education of elderly individuals in Malaysia. The objectives for the second cohort of survey in the first part are to identify significant relationship between demographic factors and financial planning factors and to identify the significant determinants that influence financial retirement planning of elderly individuals in Malaysia. Finally, the objective for interview in the second part is to highlight the impact of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia.

Survey (1st Cohort)

As mentioned earlier, the first cohort involved survey. This study was carried out among 1239 respondents. This sample size was considered large as Creswell (2012) suggested that minimum number of 350 respondents was sufficient to carry out a survey in the educational field. The study was carried out to answer the following research question:

a) What are the determinants of financial literacy education of elderly individuals in Malaysia?

This cohort emphasised on quantitative analysis, including descriptive analysis and binary logistic regression.

Descriptive analysis. Descriptive analysis was done for the data from 1239 respondents. Presenting the data using descriptive statistics was crucial as it aided in understanding patterns that might emerge from the data by viewing the representative of data in a simpler yet meaningful way (Laerd Statistics, 2013). Table 4.1 represents the results of frequency analysis of the research data.

Table 4.1

Descriptive statistics for survey data in the Survey (1st cohort)

Characteristics	N	%
Demographic factors		
Age		
64 and less	349	28.2
65 and above	890	71.8
Gender		
Male	543	43.8
Female	696	56.2
Ethnicity		
Malay	380	30.7
Chinese	451	36.4
Indian	400	32.3
Others	8	0.6
Marital status		
Married	921	74.3
Unmarried & Others	318	25.7

Live alone		
Yes	72	5.8
No	1167	94.2
Education level		
Primary or less	295	23.8
Secondary	598	48.3
Tertiary	346	27.9
Ownership of house		
Yes	1210	97.7
No	29	2.3
Types of house		
Landed properties	1075	86.8
Non-landed properties	164	13.2
Years of residence		
41 years and above	248	20
40 years and below	991	80
Wealth		
Necessity	183	14.8
Have both luxury and necessity wealth	1049	84.7
Do not have both luxury and necessity wealth	7	0.6
Financial attitude factors		
Dependency		
Direct_dependency	310	25
Indirect_dependency	84	6.8
Do not have both direct and indirect dependency	845	68.2
Minimum monthly expenses		
RM1000 and below	864	69.7
RM1001 and above	375	30.3
Financial education factors		
Ownership of assets		
Asset_vehicle	690	55.7
Asset_property	461	37.2
Do not own any assets	88	7.1
Sources of income		
Productive_income	853	68.8
Non-productive_income	386	31.2
Outstanding housing loan		
Yes	107	8.6
No	1132	91.4
Total number of respondents	**1239**	**100**

Table 4.1 reports the variables related to demographic factors, financial attitude factors and financial education factors. There were 10 variables related to demographic factors; age, gender, ethnicity, marital status, live alone, education level, ownership of house, types of house, years of residence and wealth. Most of the respondents who participated in this study aged 65 and above (71.8%) and 28.2 per cent of respondents who were aged 64 and less involved in this study. The percentage of female respondents who participated in this study (56.2%) was higher than male respondents (43.8%). The results also indicated that among the three main ethnic groups in Malaysia, Chinese respondents who participated in this study had a highest percentage of participation (36.4%) compared to Malay (30.7%), Indian (32.3%) and others (0.6%). The amount of married respondents who participated in this study was 74.35 per cent compared to unmarried respondents 25.7 per cent. The analysis also found that most of the respondents who participated in this study do not live alone (94.2%), however a small number of them do live alone (2.3%).

Then, results also indicated that most of the respondents who participated in this study mostly with secondary education level (48.3%), followed by tertiary education level (27.9%) and primary or less education level (23.8%). Most of the respondents who participated in this study owned a house (97.7%) and only 2.3 per cent of respondents do not own any house. Those who owned houses mostly had landed properties (86.8%) and 13.2 per cent of the respondents owned non-landed properties. Results also showed that 80 per cent of the respondents who participated in this study lived in their current houses for 40 years and below while 20 per cent of them lived for 41 years and above. The analysis also revealed that most of the respondents who participated in this study had both luxury and necessity wealth (84.7%) compared to those who has only necessity wealth (14.8%).

There were two variables related to financial attitude factors; dependency and minimum monthly expenses. 25 per cent of respondents who participated in this study had direct dependency compared to respondents who had indirect dependency (6.8%). 69.7 per cent of respondents who participated in this study had minimum monthly expenses of RM1000 and below and 30.3 per cent had minimum monthly expenses of RM1001 and above. There were three variables related to financial education factors; ownership of assets, sources of income and outstanding housing loan. Almost half percentage of respondents who participated in this study owned vehicle assets (55.7%) and 37.2 per cent of respondents owned property assets. Respondents who participated in this study had non-productive income (31.2%) and more than half of them had productive income (68.8%). 91.4 per cent of respondents who participated in this study did not have outstanding housing loan and only a few of them had outstanding housing loan (8.6%).

Analysis of research questions

Research Question 1

What are the determinants of financial literacy of elderly individuals in Malaysia?

Logistic regression analysis was used to answer the first research question. Total number of respondents included in this analysis was 1239. The data was recoded to conduct logistic regression analysis. The dependent variable in this study was dummy variable (yes/no); thus, logistic regression was used to analyse the data. SPSS software was used to run the analysis.

The independent factors included in this study were demographic factors (age, gender, ethnicity, marital status, child, live alone, education level, ownership of house, types of house, years of residence, and wealth), financial attitude factors (dependency and minimum monthly expenses) and financial education factors (ownership of assets, sources of income and outstanding housing loan). The dependent variable was a dummy variable: manage monthly expenditure (1: Yes, 0: No). Table 4.2 indicates the descriptions of variables used in the analysis.

Table 4.2
Description of variables

Variable	Description
Age	Dummy variable (1 if respondent is 65 and more; 0 if respondent is 64 and less)
Male	Dummy variable (1 if respondent is male, 0 if respondent is female)
Malay	Dummy variable (1 if respondent is Malay; 0 otherwise)
Chinese	Dummy variable (1 if respondent is Chinese; 0 otherwise)
Indian Indian;	Dummy variable (1 if respondent is 0 otherwise)
Others	Dummy variable (1 if respondent is Others; 0 otherwise)
Married	Dummy variable (1 if respondent is married; 0 otherwise)
Alone	Dummy variable (1 if respondent lives alone; 0 otherwise)
Prior less	Dummy variable (1 if respondent has primary or less education, 0 otherwise)
Sec	Dummy variable (1 if respondent has secondary education, 0 otherwise)
Tert	Dummy variable (1 if respondent has tertiary education, 0 otherwise)
Own house	Dummy variable (1 if respondent owns a house; 0 otherwise)

House type	Dummy variable (1 if respondent lives in landed properties; 0 otherwise)
Resident 40 andabove	Dummy variable (1 if respondent lived in the residence for 41 and above years; 0 otherwise)
Wealth_necessity	Dummy variable (1 if respondent has necessity amenities like either/or television, computer or internet/Wi-Fi; 0 otherwise)
Wealth_luxury	Dummy variable (1 if respondent has luxury amenities like either/or air-conditioner or microwave; 0 otherwise)
Have both luxury and necessity wealth	Dummy variable (1 if respondent has necessity and luxury amenities; 0 otherwise)
Do not have both luxury and necessity not wealth	Dummy variable (1 if respondent does have necessity and luxury amenities; 0 otherwise)
Asset_property	Dummy variable (1 if respondent has either/or a house, shop or land; 0 otherwise)
Asset_vehicle	Dummy variable (1 if respondent has either/or at least a car or motorcycle; 0 otherwise)
Do not own any assets	Dummy variable (1 if respondent does not own any assets; 0 otherwise)
Prod_inc	Dummy variable (1 if respondent has productive income like either/or income from own work, income from working spouse, interest/dividend from savings and investments or rental from properties; 0 otherwise)

Non-prod_inc	Dummy variable (1 if respondent has non-productive income like either/or remittance from children, annuity, own pension or spouse's pension; 0 otherwise)
Direct_dependency	Dummy variable (1 if respondent has direct dependent like either/or spouse or children; 0 otherwise)
Indirect_dependency	Dummy variable (1 if respondent has indirect dependent like either/or parents/parents-in-law, siblings or others; 0 otherwise)
Do not have both direct and not indirect dependency	Dummy variable (1 if respondent does have both direct and indirect dependacy ; 0 otherwise)
Min_mthly_expenses	Dummy variable (1 if respondent's monthly expenses is RM1000 and below; 0 if respondent's monthly expenses is RM1001 and above
Unpaidloan	Dummy variable (1 if respondent has outstanding housing loan; 0 otherwise)
Managing_Mthly_Exp (**DV**)	Dummy variable (1 if respondent can manage monthly expenditure; 0 otherwise)

Sensitivity analysis. Sensitivity analysis was conducted with different variables and the best model with the highest R square was chosen. Sensitivity analysis is conducted as it plays an important role in variety of statistical methodologies including model selection (Jassim, 2008). Table 4.3 shows sensitivity analysis for four models.

Table 4.3

Sensitivity analysis

Variables	Model 1		Model 2		Model 3		**Model 4**	
	B (S.E.)	Sig	B (S.E.)	Sig	B (S.E.)	Sig	B (S.E.)	Sig
Age			-.158	.318	-.174	.270	-.171	.281
			(.158)		(.158)		(.158)	
Male	.048	.750	.073	.631	.154	.323	.121	.447
	(.150)		(.152)		(.155)		(.159)	
Malay	-.470	.533	-.490	.515	-.463	.538	-.441	.559
	(.754)		(.752)		(.752)		(.754)	
Chinese	-.932	.216	-.938	.212	-.931	.214	-.875	.244
	(.753)		(.751)		(.750)		(.751)	
Indian	-.587	.435	-.589	.433	-.629	.402	-.546	.468
	(.753)		(.751)		(.750)		(.751)	
Married	.197	.277	.185	.308			.187	.303
	(.181)		(.181)				(.181)	
Child	.343	.154	.334	.164	.316	.189		
	(.240)		(.240)		(.240)			
Alone	-.171	.589	-.175	.582	-.288	.345	-.188	.553
	(.317)		(.317)		(.305)		(.318)	
Primorless	.674	.004**	.665	.005**	.585	.016**	520	.029*
	(.236)		(.236)		(.242)		(.238)	
Sec	.701	.000***	.690	.000***	.643	.001***	.633	.001**
	(.187)		(.188)		(.190)		(.190)	
Ownhou	.772	.166	.800	.151	.809	.146	.754	.176
	(.557)		(.557)		(.557)		(.557)	
Hsetype	.182	.417	.192	.394	.213	.344	.207	.358
	(.225)		(.225)		(.225)		(.225)	
Resident 40 and above	.212	.212	.234	.172	.212	.216	.221	.198
	(.170)		(.171)		(.171)		(.172)	
Wealth_ luxury	-.427	.039*	-.421	.042*	-.389	.061	-.408	.049*
	(.207)		(.207)		(.207)		(.207)	
Wealth_ necessity								
Direct_ dependency	.212	.214	.198	.248	.227	.185	.192	.263
	(.170)		(.171)		(.171)		(.172)	
Indirect_ dependency	.230	.408	.235	.399	.197	.476	.213	.445
	(.278)		(.278)		(.277)		(.278)	
Min_Mthly_ Expenses	-.377	.022*	-.383	.020*	-.352	.031	-.377	.022*
	(.164)		(.164)		(.163)		(.164)	

Asset_ vehicle					-.122 (.160)	.445	-.131 (.160)	.412
Asset_ property					-.225 (.156)	.148	-.231 (.156)	.137
Productive_ income	-.219 (.155)	.158	-.241 (.157)	.123	-.171 (.159)	.283	-.171 (.160)	.284
Non-productiv Income								
Unpaidloan	-.194 (.257)	.451	-.213 (.258)	.409	-.172 (.259)	.508	-.175 (.259)	.500

Note: Standard errors in parentheses
* p< 0.05
** p<0.01
*** p<0.001

Table 4.3 clearly shows the values of beta coefficient, standard error and significance of variables in four different models. Model 4 was chosen as the best model upon conducting sensitive analysis. The number of predicted variables in this model was 20. The variable others acted as the base in ethnicity. The variable tertiary acted as the base in education level. The variable non-productive income acted as the base in sources of income.

The Omnibus Test of Model Coefficients gave an overall indication of how well the model performs. It was found that the chi-square was highly significant (x^2 = 67.61, df = 20, p< 0.00). Thus, the new model was a better fit than the constant model. The Hosmer and Lemeshow test supported the model being worthwhile. The p-value (0.319) indicated that the model was a good fit for the data since it was greater than alpha, $\alpha = 0.05$.

The initial log-likelihood was = 1382.932 and the value reduced to 1315.326. This indicated that the model was better at predicting the outcome with these variables being included.

In order to evaluate the goodness-of-fit of this model, Cox and Snell R Square was used in this study. The Cox and Snell R-square formula is as following:

$$R^2 = 1 - \left[\frac{-2LL_{null}}{-2LL_k} \right]^{2/n}$$

The null model is the logistic model with just the constant and the *k* model contains all the predictors in the model (Fall, 2010). The value of Cox and Snell is lesser than 1 as it cannot reach a maximum value of 1(Wuensch, 2014).

In Cox and Snell R Square, the improvement of the full model over the intercept model is reflected based on the ratio of likelihoods (smaller the ratio, the greater the improvement) (Institute for Digital Research and Education, IDRE, 2011). The finding in this study indicated that the value for Cox and Snell R Square for the Model 4 was .053, suggesting a better fit. The probability of chi-square (0.00) indicated that the null Hypothesis was rejected (the independent variables do not affect the dependent variable).

Odds ratios. Odds ratios analysis was conducted as well. The relationship between an exposure and an outcome is measured using odds ratios (Szumilas, 2010). Table 4.3 presents the odds ratios Exp(B) for each variable in the model.

Table 4.4

Odds ratios for the model

Variables	Exp(B)	Sig	95% C.I. for Exp(B)	
			Lower	Upper
Age	.843	.281	.618	1.150
Male	1.129	.447	.826	1.542
Malay	.643	.559	.147	2.821
Chinese	.417	.244	.096	1.817
Indian	.580	.468	.133	2.526
Married	1.206	.303	.845	1.720
Alone	.828	.553	.444	1.544
Primorless	1.683	.029*	1.056	2.682
Sec	1.884	.001**	1.298	2.734
Ownhou	2.125	.176	.713	6.332
Hsetype	1.230	.358	.791	1.912
Resident40andabove	1.247	.198	.891	1.746
Wealth_luxury	.665	.049*	.443	.998
Direct_dependency	1.211	.263	.866	1.695
Indirect_dependency	1.237	.445	.717	2.135
Min_Mthly_Expenses	.686	.022*	.497	.946
Asset_vehicle	.877	.412	.641	1.200
Asset_property	.793	.137	.585	1.076
Productive_income	.843	.284	.617	1.153
Unpaidloan	.840	.500	.506	1.395

Block 0 likelihood = 1382.932
Block 1 likelihood = 1315.326
Cox and Snell R Square = .053
$x^2 = 67.61$, df = 20, p< 0.00

Table 4.4 shows that the odds ratios ([Exp(B)] with confidence interval) for each variables in the model. Odds ratios are used in logistic regression to represent the constant effect of a predictor X, on the likelihood that one outcome will occur (Karen, 2008). For odds ratios that are more than 1; there is an increase in the likelihood and for odds ratios that are less than 1; there is a decrease in the likelihood (Leech, Barrett and Morgan, 2011).

The odds ratio for primorless is statistically significant. The odds ratio for primorless is more than 1 (1.683). This indicates that those with primary or less level of education are 1.683 more likely to manage monthly expenditure than those with tertiary education.

The finding of this study found that the odds ratio for sec was statistically significant. The odds ratio for sec was more than 1 (1.884). This indicated that those with secondary level of education were 1.884 more likely to manage monthly expenditure than those with tertiary education.

The odds ratio for wealth_luxury is statistically significant. The odds ratio for wealth_luxury was less than 1 (.665). This indicated that that those who had luxury amenities like air-conditioner or microwave was 0.665 less likely to manage monthly expenditure than those who did not have luxury amenities.

The odds ratio for min_mthly_expenses was statistically significant. The odds ratio for min_mthly_expenses was less than 1 (.686). This indicated that those who have minimum monthly expenses of RM1000 and below was .686 less likely to manage monthly expenditure than those who have minimum monthly expenses of RM1001 and above.

Meanwhile, the findings for coefficient of age, male, Malay, Chinese, Indian, married, alone, ownhou, hsetype, resident40andabove, direct_dependency, indirect_dependency, asset_vehicle, asset_property, productive_income and unpaidloan were not statistically significant. This indicated that these factors were not important determinants of managing monthly expenditure for elderly.

The overall findings using binary logistic regression to answer the first research question; what are the determinants of financial literacy of elderly individuals in Malaysia depicted that level of education, owning luxury amenities and minimum monthly expenses were the determinants that significantly determine the financial literacy of elderly individuals in Malaysia. In terms of education level, it was found that despite of having lesser level of education like primary or less and secondary, elderly individuals had the financial knowledge to manage their monthly expenditure compared to with those who had tertiary education.

Besides that, the findings also indicated that elderly individuals who had luxury amenities like microwave and air-conditioner and those who had minimum monthly expenses of RM1000 and below were less likely to manage their monthly expenditure compared to those who did not have luxury amenities and those who had minimum monthly expenses of RM1001 and above respectively.

Out of 20 variables which were included in the binary logistic regression analysis, 16 variables were found not statistically significant. Age, male, Malay, Chinese, Indian, married, alone, own house, house type, resident40andabove, direct dependency, indirect dependency, asset vehicle, asset property, productive income and unpaid loan are factors which were not important determinants of financial literacy for elderly individuals.

Survey (2nd Cohort)

As mentioned earlier, the second cohort involved survey. This study was carried out on 623 respondents. This sample size was considered large as minimum number of respondents required to perform a survey in educational field was 350 (Creswell, 2012). The study was carried out to answer the following research question:

a) Are there any significant relationships between demographic factors and financial planning factors?
b) What are the determinants (demographic, financial literacy, financial attitude, financial education) that significantly determine the financial retirement planning?

This cohort emphasises on quantitative analysis, including descriptive analysis, cross-tabulation and multinomial logistic regression.

Descriptive analysis. First, the data collected from 623 respondents was analysed using descriptive analysis. The frequencies of each variable is presented in table 4.4 as it is important to understand the patterns that might emerge by viewing the data in a simple and meaningful way (Laerd Statistics, 2013). The frequencies in descriptive analysis also aided in determining the reference category or group for the multinomial logistic regression analysis. Suppose a dependent variable has several categories, only one value with the first, the last or the value with the highest frequency is designated as the reference category (Williams, 2016). Table 4.4 represents the results of frequency analysis of the research data.

Table 4.5

Descriptive statistics for survey data in the Survey (2nd cohort)

Characteristics	N	%
Demographic factors		
Age Group		
65 and above	458	73.5
64 and less	165	26.5
Gender		
Male	272	43.7
Female	351	56.3
Ethnicity		
Malay	184	29.5
Chinese	227	36.4
Indianothr	212	34.0
Marital status		
Married	465	74.6
Unmarried & Others	158	25.4
Education level		
Primary or less	136	21.8
SecondaryandAbove	487	78.2

Financial literacy factors		
Ownership of assets (multiple choice)		
Asset_vehicle	203	32.6
Asset_property	37	5.9
Both Asset Vehicle and Property	137	22.0
Do not have any asset	246	39.5
Source of income (multiple choice)		
Productive_income	132	21.2
Non-productive_income	147	23.6
Both Productive and Non-Productive income	344	55.2
Minimum monthly expenses		
RM1001 and above	402	64.5
Rm1000 and below	221	35.5
Financial attitude factors		
Dependency ((multiple choice)		
Direct_dependency	106	17.0
Indirect_dependency	22	3.5
Both Direct and Indirect dependency	15	2.4
Not have any dependency	480	77.0
Financial status (compared to five years ago)		
Worse	203	32.6
Same	420	67.4
Comfortable retirement (multiple choice)		
Not confident	184	29.5
Very confident	66	10.6
Family support	186	29.9
Pension/Welfare	187	30.0
Duration_ saving to last		
10 years and below	107	17.2
11 years and above	100	16.1
None	416	66.8
Estimation saving for retirement (ever tried to figure out)		
Yes	147	23.6
No	476	76.4
Monitor actual spending		
Yes	346	55.5
No	277	44.5

Financial education factors		
Financial planning ways (multiple choice)		
Family and friends and counselling	37	5.9
Individual	111	17.8
Do not have financial planning	475	**76.2**
DEPENDENT VARIABLE (DV)		
Budget spending		
Often	145	23.3
Occasionally	145	23.3
Never	333	53.5
TOTAL	**623**	**100**

Table 4.5 reports the variables related to demographic levels factors, financial literacy level factors, financial attitude level factors and financial education level factors. There were 6 variables related to demographic level factors; age, gender, ethnicity, marital status, number of children and education level. Most of the respondents who participated in this study aged 65 and above (73.5%) and 26.5 per cent of respondents who were aged 64 and less involved in this study. The percentage of female respondents who participated in this study (56.3%) was higher than male respondents (43.7%). The results also indicated that among the three main ethnic groups in Malaysia, Chinese respondents who participated in this study had a highest percentage of participation (36.4%) compared to Malay (29.5%), Indian and others (34.0%).

The amount of married respondents who participated in this study was 74.6 per cent compared to unmarried respondents 25.4 per cent. Most of the respondents who

took part in this survey had 5 and below number of children (89.9%) and 10.1 per cent of respondents had 6 and above number of children. Then, results also indicated that most of the respondents who participated in this study mostly with secondary and above levels of education (78.2%) and primary or less education level (21.8%).

There were three variables related to financial literacy level factors; ownership of assets, sources of income and minimum monthly expenses. Respondents who owned vehicle assets were 32.6 per cent compared to those respondents who owned property assets which were 5.9 per cent. However, 22.0 per cent respondents owned both types of assets which are vehicle and property assets. Almost all the respondents who participated in this study had both productive and non-productive income (55.2%) and 21.2 per cent had only productive income while 23.6 per cent had non-productive income. 64.5 per cent of respondents who participated in this study had minimum monthly expenses of RM1000 and above and 35.5 per cent had minimum monthly expenses of RM1001 and below.

There were six variables related to financial attitude level factors; dependency, financial status, comfortable retirement, durations for savings to last, estimation savings for retirement and monitor actual spending. 17.0 per cent of respondents who participated in this study had direct dependency compared to respondents who had indirect dependency (3.5%). More than half of the respondents stated that their financial status was the same compared to five years ago (67.4%) compared to those who said that their financial status was worse compared to five years ago (32.6%). Respondents who were not confident retiring comfortably because of not enough money were 29.7 per cent compared to respondents who were very confident retiring comfortably because of sufficient money were 10.6 per cent.

Respondents who did not think about having sufficient money to retire comfortably as they have family support were 29.9 per cent and respondents who did not think about having sufficient money to retire comfortably as they were getting money from pension or welfare were 30.0 per cent. In terms of duration of savings to last, respondents who did not expect their savings to last had the highest frequency

(66.6%) compared to those who expected their savings to last for less than ten years (17.2%) and more than 11 years (16.1%). Next, more than half of the respondents did not ever tried to figure out how much they need to save for retirement (76.4%) and 23.6 per cent of respondents who figured out how much they need to save for retirement. 55.5 per cent of respondents kept track of their actual spending and 44.5 per cent of respondents never kept track of their actual spending.

There was one variable related to financial education level factor; which was financial planning ways. Respondents who planned on their own were 17.8 per cent compared to respondents who seek for help from their family, friends and through counselling (5.9%).

Analysis of Research Questions

Research Question 2

a) Are there any significant relationships between demographic factors and financial planning factors?

Cross-tabulation analysis was used to answer the first research question. Total number of respondents included in this analysis was 623. Seven financial planning variables were included in the cross-tabulation analysis of the second cohort of survey. Further analysis was done to indicate financial planning variables (asset_ ownership, comfortable retirement, duration_savingtolast, estimation_retrmntsaving, financial planning ways, five year financial situation and monitor_spending) by age, gender, ethnicity and education level. The results in Table 4.6 to 4.33 indicate the significant relationships between demographic factors and financial planning factors.

Cross-tabulation for Asset Ownership against age, gender, ethnicity and education level

Table 4.6

Chi-Square Test and Symmetric Measures for Asset Ownership against Age

		Age_65 and Above					
		No		Yes		Total	
		N	%	N	%	N	
Asset_ownership	Yes	108	28.65	269	71.35	377	60.51
	No	57	34.55	189	41.27	246	39.49
Total		165	26.48	458	73.52	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		2.293[a]		1		.130	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.061		.130			
	Cramer's V	.061		.130			

Based on Table 4.6, there were 377 (60.51%) respondents who owned at least one asset; either or both property and vehicle while the other 246 (39.49%) respondents did not have any type of assets. 269 (71.35%) out of 377 respondents age 65 and above owned at least one asset while the other 108 (28.65%) of them aged 64 and below. Among 165 (26.48%) of the total respondents aged 64 and below, 57 (34.55%) of them did not own any type of assets. Among 458 (73.52%) of the total respondents aged 65 and above, 189 (41.27%) of them did not own any type of assets.

The result also indicated that the probability of the chi-square test statistic (χ^2=2.293) was p=0.130, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.061) indicated a very weak and statistically insignificant relationship between Age and Asset Ownership.

Table 4.7

Chi-Square Test for Asset Ownership against Gender

		Gender					
		Male		Female		Total	
		N	%	N	%	N	%
Asset_ownership	Yes	214	78.68	163	46.44	377	60.51
	No	58	21.32	188	53.56	246	39.49
Total		272	43.66	351	56.34	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		66.652[a]		1		.000	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.327		.000			
	Cramer's V	.327		.000			

Based on Table 4.7, 272 (43.66%) respondents were Male and 214 (78.68%) of them owned at least one type of asset either or both property and vehicle while the other 58 (21.32%) of them did not have any type of assets. 351 (56.34%) out of 623 respondents were Female and 163 (46.44%) of them owned at least one asset while 188 (53.56%) of Female respondents did not have any type of asset.

The result also indicated that the probability of the chi-square test statistic (χ^2=66.652) was p=0.000, less than the alpha level of significance of 0.05. The value of Cramer's V (0.327) indicated a positive relationship and statistically significant relationship between Gender and Asset Ownership.

Table 4.8

Chi-Square Test for Asset Ownership against Ethnicity

		Ethnicity							
		Malay		Chinese		IndOthr		Total	
		N	%	N	%	N	%	N	%
Asset_ownership	Yes	120	65.22	139	61.23	118	55.66	377	60.51
	No	64	34.78	88	38.77	94	44.34	246	39.49
Total		184	29.53	227	36.44	212	34.03	623	100.00

Chi-squared Test	Value	df	Sig. (2-sided)
Pearson Chi-Squared	3.843[a]	2	.146

Symmetric Measures	Value	Approx. Sig.
Phi	.079	.146
Cramer's V	.079	.146

Based on Table 4.8, 184 (29.53%) respondents were Malay and 120 (65.22%) of them owned at least one type asset either or both property and vehicle while the other 64 (34.78%) of them did not have any type of asset. 227 (36.44%) of the total respondents were Chinese and 139 (61.23%) of them owned at least one type asset while the other 88 (38.77%) of them did not have any type of asset. Out of 623 of the total respondents, 212 (34.03%) of them comprised of Indian and Other ethnicity and 118 (55.66%) of them owned at least one type asset while the other 94 (44.34%) of them did not have any type of asset.

The result also indicated that the probability of the chi-square test statistic (χ^2=3.843) was p=0.146, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.079) indicated a very weak and statistically insignificant relationship between Ethnicity and Asset Ownership.

Table 4.9

Chi-Square Test for Asset Ownership against Education Level

		Education Level					
		Primorless		SecondAbove		Total	
		N	%	N	%	N	%
Asset_ownership	Yes	57	41.91	320	65.71	377	60.51
	No	79	58.09	167	34.29	246	39.49
Total		136	21.83	487	78.17	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		25.195[a]		1		.000	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.201		.000			
	Cramer's V	.201		.000			

Based on Table 4.9, 136 (21.83%) respondents just completed Primary education and 57 (41.91%) of them owned at least one type asset either or both property and vehicle while the other 79 (58.09%) of them did not have any type of asset. 487 (78.17%) of the total respondents had completed Secondary and above education and 320 (65.71%) of them owned at least one type asset while the other 167 (34.29%) of them did not have any type of asset.

The result also indicated that the probability of the chi-square test statistic (χ^2=25.195) was p=0.000, less than the alpha level of significance of 0.05. The value of Cramer's V (0.201) indicated a positive and statistically significant relationship between Education Level and Asset Ownership.

Cross-tabulation for Comfortable Retirement against age, gender, ethnicity and education level.

Table 4.10

Chi-Square Test and Symmetric Measures for Comfortable Retirement against Age

		Age_65 and Above					
		No		Yes		Total	
		N	%	N	%	N	%
Comfortable	Not confident	63	34.05	122	65.95	185	29.70
Retirement	Very confident	18	27.69	47	72.31	65	10.43
	Family supports	54	29.03	132	70.97	186	29.86
	Pension/Welfare	30	16.04	157	83.96	187	30.02
Total		165	26.48	458	73.52	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		16.585[a]		3		.001	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.163		.001			
	Cramer's V	.163		.001			

Based on Table 4.10, there are 185 (29.70%) respondents who were not confident that they had enough money to live comfortably after retirement and 63 (34.05%) of them were aged 64 and below while the other 122 (65.95%) of them were aged 65 and above. 65 (10.43%) of the total respondents were very confident that they had enough money to live comfortably after retirement and 18 (27.69%) of them were aged 64 and below while the other 47 (72.31%) of them were aged 65 and above.

186 (29.86%) of the total respondents never thought about money after retirement since they had support from their family and 54 (29.03%) of them were aged 64 and below years old while the other 132 (70.97%) of them were aged 65 and above. There were another 187 (30.02%) respondents never thought about money after retirement because they will get pension or welfare and 30 (16.04%) of them

were aged 64 and below while the other 458 (83.96%) of them were aged 65 and above.

The result also indicated the probability of the chi-square test statistic (χ^2=16.585) was p=0.001, less than the alpha level of significance of 0.05. The value of Cramer's V (0.163) indicated a positive and statistically significant relationship between Age and Comfortable Retirement.

Table 4.11

Chi-Square Test and Symmetric Measures for Comfortable Retirement against Gender

		Gender					
		Male		Female		Total	
		N	%	N	%	N	%
Comfortable Retirement	Not confident	94	50.81	91	49.19	185	29.70
	Very confident	39	60.00	26	40.00	65	10.43
	Family supports	52	27.96	134	72.04	186	29.86
	Pension/Welfare	87	46.52	100	53.48	187	30.02
Total		272	43.66	351	56.34	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		30.170[a]		3		.000	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.220		.000			
	Cramer's V	.220		.000			

Based on Table 4.11, there were 185 (29.70%) respondents who were not confident that they had enough money to live comfortably after retirement and 94 (50.81%) of them were Male while the other 91 (49.19%) of them were Female. There were only 65 (10.43%) of the total respondents were very confident that they had enough money to live comfortably after retirement and 39 (60.00%) of them were Male while the other 26 (40.00%) of them were Female. 186 (29.86%) of the total respondents never thought about money after retirement since they had support from their family and 52 (27.96%) of them were Male while the other 134 (72.04%) of them were Female. There were another 187 (30.02%) of the total respondents never thought about money after retirement because they will get pension or welfare and 87 (46.52%) of them were Male while the other 100 (53.48%) of them were Female.

The result also indicated the probability of the chi-square test statistic (χ^2=30.170) was p=0.000, less than the alpha level of significance of 0.05. The value of Cramer's V (0.220) indicated a positive and statistically significant relationship between Gender and Comfortable Retirement.

Table 4.12

Chi-Square Test and Symmetric Measures for Comfortable Retirement against Ethnicity

		Ethnicity							
		Malay		Chinese		IndOthr		Total	
		N	%	N	%	N	%	N	%
Comfortable	Not confident	41	22.16	94	50.81	50	27.03	185	29.70
Retirement	veryconfident	11	16.92	27	41.54	27	41.54	65	10.43
	Family supports	64	34.41	68	36.56	54	29.03	186	29.86
	Pension/Welfare	68	36.36	38	20.32	81	43.32	187	30.02
Total		184	29.53	227	36.44	212	34.03	623	100.00

Chi-squared Test	Value	df	Sig. (2-sided)
Pearson Chi-Squared	45.485[a]	6	.000

Symmetric Measures	Value	Approx. Sig.
Phi	.270	.000
Cramer's V	.191	.000

Based on Table 4.12, 185 (29.70%) respondents who were not confident that they had enough money to live comfortably after retirement and 41 (22.16%) of them were Malay, 94 (50.81%) were Chinese while 50 (27.03%) were Indian and Other ethnicity. There were only 65 (10.43%) of the total respondents were very confident that they had enough money to live comfortably after retirement and 11 (16.92%) of them were Malay while both Chinese and Indian with Other Ethnicity were 27 (41.54%). 186 (29.86%) of the total respondents never thought about money after retirement since they had support from their family and 64 (34.41%) of them were Malay, 68 (36.56%) were Chinese while 54 (29.03%) were Indian and Other ethnicity. 187 (30.02%) of the total respondents never thought about money after retirement because they will get pension or welfare and 68 (36.36%) of them were Malay, 38 (20.32%) were Chinese while 81 (43.32%) were Indian and Other ethnicity.

The result also indicated the probability of the chi-square test statistic (χ^2=45.485) was p=0.000, less than the alpha level of significance of 0.05. The value of Cramer's V (0.191) indicated a positive and statistically significant relationship between Ethnicity and Comfortable Retirement.

Table 4.13

Chi-Square Test and Symmetric Measures for Comfortable Retirement against Education Level

		Education Level					
		Primorless		SecondAbove		Total	
		N	%	N	%	N	%
Comfortable	Not confident	20	10.81	165	89.19	185	29.70
Retirement	Very confident	6	9.23	59	90.77	65	10.43
	Family supports	84	45.16	102	54.84	186	29.86
	Pension/Welfare	26	13.90	161	86.10	187	30.02
Total		136	21.83	487	78.17	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		85.428[a]		3		.000	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.370		.000			
	Cramer's V	.370		.000			

Based on Table 4.13, there were 185 (29.70%) respondents who were not confident that they had enough money to live comfortably after retirement and 20 (10.81%) of them just completed Primary education while the other 165 (89.19%) of them had completed the Secondary and above education. There were only 65 (10.43%) of the total respondents who were very confident that they had enough money to live comfortably after retirement and 6 (9.23%) of them had only completed Primary education while the other 59 (90.77%) of them had completed the Secondary and above education. 186 (29.86%) of the total respondents never thought about money after retirement since they had support from their family and 84 (45.16%) of them had only completed Primary education while the other 102 (54.84%) of them had completed the Secondary and above education.

There were 187 (30.02%) of the total respondents never thought about money after retirement because they will get pension or welfare and 26 (13.90%) just completed Primary education while the other 161 (86.10%) of them had completed the Secondary and above education. The result also indicated the probability of the chi-square test statistic (χ^2=85.428) was p=0.000, less than the alpha level of significance of 0.05. The value of Cramer's V (0.370) indicated a positive and statistically significant relationship between Education Level and Comfortable Retirement.

Cross-tabulation for Duration Saving to Last against age, gender, ethnicity and education level.

Table 4.14

Chi-Square Test and Symmetric Measures for Duration Saving to Last against Age

		Age_65andAbove					
		No		Yes		Total	
		N	%	N	%	N	%
Duration	1-10 years	33	30.84	74	69.19	107	17.17
Saving to	11 and above	34	34.00	66	66.00	100	16.05
Last	None	98	15.73	318	51.04	416	66.77
Total		165	26.48	458	73.52	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		5.774[a]		2		.056	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.096		.056			
	Cramer's V	.096		.056			

Based on Table 4.14, 318 (51.04%) respondents aged 65 and above and 98 (15.73%) respondents aged 64 and below out of 623 did not have any expectation about how long their saving will last. Out of 107 (17.17%) respondents who expected their saving will be last within 1 to 10 years, 33 (30.84%) of them aged 64 and below while 74 (69.16%) of them aged 65 and above. Out of 100 (16.05%)

respondents who expected their saving will last for more than 11 years, 34 (34%) of them aged 64 and below while 66 (66%) of them aged 65 and above.

The finding also indicated that the probability of the chi-square test statistic (χ^2=5.774) was p=0.056, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.095) indicated a very weak and statistically insignificant relationship between Age and the Duration of Saving Last.

Table 4.15

Chi-Square Test and Symmetric Measures for Duration Saving to Last against Gender

		Gender					
		Male		Female		Total	
		N	%	N	%	N	%
Duration	1-10 years	57	53.27	50	46.73	107	17.17
Saving to	11 and above	52	52.00	48	48.00	100	16.05
Last	None	163	39.18	253	60.81	416	66.77
Total		272	43.66	351	56.34	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		10.236[a]		2		.006	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.128		.006			
	Cramer's V	.128		.006			

Based on Table 4.15, 107 (17.17%) respondents expected that their saving will last within 1 to 10 years and 57 (53.27%) of them were Male while 50 (46.73%) were Female. 100 respondents expected that their saving will last more than 10 years and 52 (52.00%) of them were Male while 48 (48.00%) were Female. 253 (60.81%) Female respondents and 163 (39.18%) Male respondents out of 623 did not have any expectation about how long their saving will last.

The finding also indicated that the probability of the chi-square test statistic (χ^2=10.236) was p=0.006, less than the alpha level of significance of 0.05. The value of Cramer's V (0.128) indicated a positive and statistically significant relationship between Gender and the Duration of Saving Last.

Table 4.16

Chi-Square Test and Symmetric Measures for Duration Saving to Last against Ethnicity

		Ethnicity							
		Malay		Chinese		IndOthr		Total	
		N	%	N	%	N	%	N	%
Duration	1-10 years	20	18.69	64	59.81	23	21.50	107	7.17
Saving to	11 and above	19	19.00	45	45.00	36	36.00	100	6.05
Last	None	145	34.86	118	28.37	153	36.78	416	66.77
Total		184	29.53	227	36.44	212	34.03	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)			
Pearson Chi-Squared		43.481[a]		4		.000			
Symmetric Measures		Value		Approx. Sig.					
	Phi	.264		.000					
	Cramer's V	.187		.000					

Based on Table 4.16, each ethnicity showed higher frequency in the third category where they never had any expectation on how long their savings will last. Among 107 respondents who stated that their saving will be last within 1 to 10 years, 20 (18.69%) of them were Malay, 64 (59.81%) were Chinese and 23 (21.50%) were Indian and Other ethnicity. Out of 100 respondents who expected that their saving will last for more than 10 years, majority of them were Chinese (45.00%) followed by Indian and Other ethnicity (36.00%), and Malay (19.00%). Among 416 (66.77%) respondents who did not have any expectation about how long their saving will last, 145 (34.86%) of them were Malay, 118 (28.37%) were Chinese and 153 (36.78%) were Indian and Other ethnicity.

The finding also indicated that the probability of the chi-square test statistic (χ^2=43.481) was p=0.000, less than the alpha level of significance of 0.05. The value of Cramer's V (0.187) indicated a positive and statistically significant relationship between Ethnicity and the Duration of Saving Last.

Table 4.17

Chi-Square Test and Symmetric Measures for Duration Saving to Last against Education Level

		Education level					
		Primorless		SecondAbove		Total	
		N	%	N	%	N	%
Duration	1-10 years	10	9.35	97	90.65	107	17.17
Saving to	11 and above	7	5.15	93	19.10	100	16.05
Last	None	119	87.50	297	60.99	416	66.77
Total		136	21.83	487	78.17	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		33.853[a]		2		.000	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.233		.000			
	Cramer's V	.233		.000			

Based on Table 4.17, both categories; Primary and Secondary and above education levels indicated that more than half of the respondents did not have an expectation on how long their saving will last. Out of 107 respondents who expected that their saving will last within 1 to 10 years, 97 (90.65%) of them had completed their Secondary and above education while 10 (9.35%) of them just completed Primary education.

93 (19.10%) respondents that had completed Secondary and above education expected that their saving will last for more than 11 years and only 7 (5.15%) out of 136 respondent who were only completed Primary education were expecting their saving will last more than 11 years. 297 (60.99%) respondents that had completed Secondary and above education did not have an expectation on how long their saving will last and 119 (87.50%) out of 136 respondent who were only completed Primary education expected their saving will last more than 11 years.

The finding also indicated that the probability of the chi-square test statistic (χ^2=33.853) was p=0.000, less than the alpha level of significance of 0.05. The value of Cramer's V (0.233) indicated a positive and statistically significant relationship between Education Level and the Duration of Saving Last.

Cross-tabulation for Estimation Retirement Saving against age, gender, ethnicity and education level

Table 4.18
Chi-Square Test and Symmetric Measures for Estimation Retirement Saving against Age

		Age_65andAbove					
		No		Yes		Total	
		N	%	N	%	N	%
Estimation Retirement Saving	Yes	47	28.48	100	21.83	476	76.40
	No	118	71.52	358	78.17	147	23.60
Total		165	26.48	458	73.52	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		2.976[a]		1		.084	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.069		.084			
	Cramer's V	.069		.084			

Based on Table 4.18, 118 (71.52%) out of 165 respondents from age group 64 and below never tried to figure out an estimation for their saving while 47

(28.48%) of them have tried to figure out an estimation of their saving for their retirement years. 358 (78.17%) out of 458 respondents from age group 65 and above never had an estimation about their saving while 100 (21.83%) of them had tried to figure out an estimation of saving for their future.

The finding also indicated the probability of the chi-square test statistic (χ^2=2.976) was p=0.084, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.069) indicated a very weak and statistically insignificant relationship between Age and the Estimation of Retirement Saving.

Table 4.19

Chi-Square Test and Symmetric Measures for Estimation Retirement Saving against Gender

		Gender					
		Male		Female		Total	
		N	%	N	%	N	%
Estimation Retirement Saving	Yes	80	54.42	67	45.58	476	76.40
	No	192	40.34	284	59.66	147	23.60
Total		272	43.66	351	56.34	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		9.059[a]		1		.003	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.121		.003			
	Cramer's V	.121		.003			

Based on Table 4.19, 476 respondents never tried to figure out how much they will need for their retirement in which 192 (40.34%) of them were Male and 284 (59.66%) were Female. 147 respondents have tried to figure out the total money needed for retirement years and 80 (54.42%) of them were Male while 67 (45.58%) were Female.

The finding also indicated the probability of the chi-square test statistic (χ^2=9.059) was p=0.003, less than the alpha level of significance of 0.05. The value of Cramer's V (0.121) indicated a positive and statistically significant relationship between Gender and the Estimation of Retirement Saving.

Table 4.20

Chi-Square Test and Symmetric Measures for Estimation Retirement Saving against Ethnicity

		Ethnicity							
		Malay		Chinese		IndOthr		Total	
		N	%	N	%	N	%	N	%
Estimation Retirement Saving	Yes	40	27.21	56	38.10	51	34.69	476	76.40
	No	144	30.25	171	35.92	161	33.82	147	23.60
Total		184	29.53	227	36.44	212	34.03	623	100.00

Chi-squared Test	Value	df	Sig. (2-sided)
Pearson Chi-Squared	.552[a]	2	.770

Symmetric Measures	Value	Approx. Sig.
Phi	.029	.770
Cramer's V	.029	.770

Based on Table 4.20, out of 476 respondents who never tried to figure out how much they will need for their retirement, 144 (30.25%) of them were Malay, 171 (35.92%) were Chinese and another 161 (33.82%) comprised of Indian and Other ethnicity. From 147 respondents who had tried to figure out their saving for their retirement, 40 (27.21%) of them were Malay, 56 (38.10%) were Chinese while 51 (34.69%) were Indian and Other ethnicity.

The finding also indicated that the probability of the chi-square test statistic (χ^2=0.552) was $p = 0.770$, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.029) indicated a very weak and insignificant relationship between Ethnicity and the Estimation of Retirement Saving.

Table 4.21

Chi-Square Test and Symmetric Measures for Estimation Retirement Saving against Education Level

		Education Level					
		Primorless		SecondAbove		Total	
		N	%	N	%	N	%
Estimation	Yes	20	14.71	127	26.08	476	76.40
Estimation Retirement Saving	No	116	85.29	360	73.92	147	23.60
Total		136	21.83	487	78.17	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		7.626[a]		1		.006	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.111		.006			
	Cramer's V	.111		.006			

Based on Table 4.21, more than half of the total respondents for both categories of education level i.e. Primary and Secondary and above have never tried to figure out an estimation of their saving to survive after their retirement. For Primary education, only 20 (14.71%) out of 136 respondents have tried to figure out an estimation of their saving while 116 (85.29%) of them never did that. For Secondary and above education, 360 (73.92%) out of 487 respondents never tried to figure out an estimation on their saving and only 127 (26.08%) of them have tried to figure out an estimation of saving for their future after their retirement.

The finding also indicated that the probability of the chi-square test statistic (χ^2=7.626) was $p = 0.006$, less than the alpha level of significance of 0.05. The value of Cramer's V (0.111) indicated a positive and significant relationship between Education Level and the Estimation of Retirement Saving.

Cross-tabulation for Financial Planning Ways against age, gender, ethnicity and education level

Table 4.22

Chi-Square Test and Symmetric Measures for Financial Planning Ways against Age

		Age_65andAbove					
		No		Yes		Total	
		N	%	N	%	N	%
Financial Planning Ways	Yes	47	28.48	99	21.62	146	23.43
	No	118	71.52	359	78.38	477	76.57
Total		165	26.48	458	73.52	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		3.190[a]		1		.074	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.072		.074			
	Cramer's V	.072		.074			

Based on Table 4.22, out of 165 respondents aged 64 and below years old, 118 (71.52%) of them did not have any financial planning for their household expenses yet while only 47 (28.48%) of them had planned their financial for their household expenses. Out of 458 respondents aged 65 and above, 359 (78.38%) of them did not have any financial planning for their household expenses yet while only 99 (21.62%) of them already had their financial planning for their household expenses.

The finding indicated that the probability of the chi-square test statistic (χ^2=3.190) was $p = 0.074$, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.069) indicated a very weak and statistically insignificant relationship between Age and the Financial Planning Ways.

Table 4.23

Chi-Square Test and Symmetric Measures for Financial Planning Ways against Gender

		Gender					
		Male		Female		Total	
		N	%	N	%	N	%
Financial Planning Ways	Yes	79	29.04	67	19.09	146	23.43
	No	193	70.96	284	80.91	477	76.57
Total		272	43.66	351	56.34	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		8.465[a]		1		.004	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.117		.004			
	Cramer's V	.117		.004			

Based on Table 4.23, out of 272 Male respondents, there were 193 (70.96%) of them did not plan their finance while only 79 (29.04%) of them already had planned their finance for their household expenses. For Female respondents, out of 351, 284 (80.91%) of them did not plan their finance for their household expenses and only 67 (19.09%) of them had planned their finance for their household expenses.

The finding also indicated that the probability of the chi-square test statistic (χ^2=8.465) was $p = 0.004$, less than the alpha level of significance of 0.05. The value of Cramer's V (0.117) indicated a positive and statistically significant relationship between Gender and the Financial Planning Ways.

Table 4.24

Chi-Square Test and Symmetric Measures for Financial Planning Ways against Ethnicity

		Ethnicity							
		Malay		Chinese		IndOthr		Total	
		N	%	N	%	N	%	N	%
Financial	Yes	39	21.20	56	24.67	51	24.06	146	23.43
Planning Ways	No	145	78.80	171	75.33	161	75.94	477	76.57
Total		184	29.53	227	36.44	212	34.03	623	100.00

Chi-squared Test	Value	df	Sig. (2-sided)
Pearson Chi-Squared	.753[a]	2	.686

Symmetric Measures	Value	Approx. Sig.
Phi	.035	.686
Cramer's V	.035	.686

Based on Table 4.24, out of 184 Malay respondents, 145 (78.80%) of them did not plan their finance for household expenses while only 39 (21.20%) of them planned their finance for household expenses. For Chinese, out of 227 respondents, 171 (75.33%) of them did not plan their finance for household expenses while 56 (24.67%) of them already planned their finance for household expenses. For Indian and Other ethnicity, out of 212 respondent, 161 (75.94%) of them did not plan their finance for household expenses while 51 (24.06%) of them already planned their finance for household expenses.

The finding also indicated that the probability of the chi-square test statistic (χ^2=0.753) was $p = 0.686$, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.035) indicated a very weak and statistically insignificant relationship between Ethnicity and the Financial Planning Ways.

Table 4.25

Chi-Square Test and Symmetric Measures for Financial Planning Ways against Education Level

		Education Level					
		Primorless		SecondAbove		Total	
		N	%	N	%	N	%
Financial Planning Ways	Yes	20	14.71	126	25.87	146	23.43
	No	116	85.29	361	74.13	477	76.57
Total		136	21.83	487	78.17	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		7.388[a]		1		.007	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.109		.007			
	Cramer's V	.109		.007			

Based on Table 4.25, out of 136 respondents who had only completed Primary education, 116 (85.29%) of them did not plan their finance for household expenses and 20 (14.71%) of them had planned their finance for household expenses. Out of 487 respondents who had completed Secondary education, 361 (74.13%) of them did not plan their finance for household expenses while 126 (25.87%) of them had planned their finance for household expenses.

The finding also indicated that the probability of the chi-square test statistic (χ^2=7.388) was $p = 0.007$, less than the alpha level of significance of 0.05. The value of Cramer's V (0.109) indicated a positive and statistically significant relationship between Education Level and the Financial Planning Ways.

Cross-tabulation for Five Years Financial Situation against age, gender, ethnicity and education level

Table 4.26

Chi-Square Test and Symmetric Measures for Five Years Financial Situation against Age

		Age_65andAbove					
		No		Yes		Total	
		N	%	N	%	N	%
Five Years Financial Situation	Same	107	64.85	313	68.34	420	67.42
	Worse	58	35.15	145	31.66	203	32.58
Total		165	26.48	458	73.52	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		.673[a]		1		.412	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.033		.412			
	Cramer's V	.033		.412			

Based on Table 4.26, out of 165 respondents aged 64 and below, 58 (35.15%) of them felt that their five years financial situation became worse while 107 (64.85%) of them felt that their five years financial situation was the same. Out of 458 respondents aged 65 and above, 145 (31.66%) of them feel that their five years financial situation has became worse while 313 (68.34%) of them feel that their five years financial situation was the same.

The finding also indicated that the probability of the chi-square test statistic (χ^2=0.673) was $p = 0.412$, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.033) indicated a very weak and statistically insignificant relationship between Age and Five Years Financial Situation.

Table 4.27

Chi-Square Test and Symmetric Measures for Five Years Financial Situation against Gender

		Gender					
		Male		Female		Total	
		N	%	N	%	N	%
Five Years Financial Situation	Same	178	65.44	242	68.95	420	67.42
	Worse	94	34.56	109	31.05	203	32.58
Total		272	43.66	351	56.34	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		.857[a]		1		.355	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.037		.355			
	Cramer's V	.037		.355			

Based on Table 4.27, out of 272 of Male respondents, 94 (34.56%) of them felt that their five years financial situation has become worse while 178 (65.44%) of them felt that their five years financial situation was the same. For Female respondents, out of 351, 109 (31.05%) of them felt that their five years financial situation has become worse while 242 (68.95%) of them felt that their five years financial situation was the same.

The finding also indicated that the probability of the chi-square test statistic (χ^2=0.857) was $p = 0.355$, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.037) indicated a very weak and statistically insignificant relationship between Gender and Five Years Financial Situation.

Table 4.28

Chi-Square Test and Symmetric Measures for Five Years Financial Situation against Ethnicity

		Ethnicity							
		Malay		Chinese		IndOthr		Total	
		N	%	N	%	N	%	N	%
Five Years Financial Situation	Same	134	72.83	149	65.64	137	64.62	420	67.42
	Worse	50	27.17	78	34.36	75	35.38	203	32.58
Total		184	29.53	227	36.44	212	34.03	623	100.00

Chi-squared Test	Value	df	Sig. (2-sided)
Pearson Chi-Squared	3.531[a]	2	.171

Symmetric Measures	Value	Approx. Sig.
Phi	.075	.171
Cramer's V	.075	.171

Based on Table 4.28, out of 184 Malay respondents, 50 (27.17%) of them felt that their five years financial situation has become worse while 134 (72.83%) of them felt that their five years financial situation was the same. For Chinese respondents, out of 227, 78 (34.36%) of them felt that their five years financial situation has become worse while 149 (65.64%) of them felt that their five years financial situation was the same. For Indian with Other ethnicity, out of 212 respondents, 75 (35.38%) of them felt that their five years financial situation has become worse while 137 (64.62%) of them felt that their five years financial situation was the same.

The finding also indicated that the probability of the chi-square test statistic (χ^2=3.531) was $p = 0.171$, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.075) indicated a very weak and statistically insignificant relationship between Ethnicity and Five Years Financial Situation.

Table 4.29

Chi-Square Test and Symmetric Measures for Five Years Financial Situation against Education Level

		Gender					
		Primorless		SecondAbove		Total	
		N	%	N	%	N	%
Five Years Financial Situation	Same	86	63.24	334	68.58	420	67.42
	Worse	50	36.76	153	31.42	203	32.58
Total		136	21.83	487	78.17	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		1.384[a]		1		.239	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.047		.239			
	Cramer's V	.047		.239			

Based on Table 4.29, out of 136 respondents had only completed Primary education, 50 (36.76%) of them felt that their five years financial situation has become worse and 86 (63.24%) of them feel that their five year financial situation was the same. For the respondents who had completed Secondary education and above, out of 487, 153 (31.42%) of them felt that their five years financial situation has become worse and 334 (68.58%) of them felt that their five years financial situation was the same.

The finding also indicated the probability of the chi-square test statistic (χ^2=1.384) was $p = 0.239$, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.047) indicated a very weak and statistically insignificant relationship between Education Level and Five Years Financial Situation.

Cross-tabulation for Monitoring Sending against age, gender, ethnicity and education level

Table 4.30
Chi-Square Test and Symmetric Measures for Monitoring Spending against Age

		Age_65andAbove					
		No		Yes		Total	
		N	%	N	%	N	%
Monitoring	Yes	113	68.48	233	50.87	346	55.54
Spending	No	52	31.52	225	49.13	277	44.46
Total		165	26.48	458	73.52	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		15.236[a]		1		.000	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.156		.000			
	Cramer's V	.156		.000			

Based on Table 4.30, out of 165 respondents aged 64 and below, 52 (31.52%) of them neglected their actual spending and 113 (68.48%) of them monitored their spending. Out of 458 respondents aged 65 and above, 225 (49.13%) of them neglected their spending while 233 (50.87%) of them monitored their actual spending.

The finding also indicated that the probability of the chi-square test statistic (χ^2=15.236) was $p = 0.000$, less than the alpha level of significance of 0.05. The value of Cramer's V (0.156) indicated a positive and statistically significant relationship between Age and Monitoring Spending.

Table 4.31

Chi-Square Test and Symmetric Measures for Monitoring Spending against Gender

		Gender					
		Male		Female		Total	
		N	%	N	%	N	%
Monitoring	Yes	158	58.09	188	53.56	346	55.54
Spending	No	114	41.91	163	46.44	277	44.46
Total		272	43.66	351	56.34	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		1.272[a]		1		.259	
Symmetric Measures		Value		Approx. Sig.			
	Phi	-.045		.259			
	Cramer's V	.045		.259			

Based on Table 4.31, out of 272 Male respondents, 114 (41.91%) of them neglected their spending while 158 (58.09%) of them monitored their actual spending. Out of 351 Female respondents, 163 (46.44%) of them neglected their actual spending while 188 (53.56%) of them monitored their actual spending.

The finding also indicateed that the probability of the chi-square test statistic (χ^2=1.272) was $p = 0.259$, greater than the alpha level of significance of 0.05. The value of Cramer's V (0.045) indicated a very weak and statistically insignificant relationship between Gender and Monitoring Spending.

Table 4.32

Chi-Square Test and Symmetric Measures for Monitoring Spending against Ethnicity

		Ethnicity							
		Malay		Chinese		IndOthr		Total	
		N	%	N	%	N	%	N	%
Monitoring	Yes	101	54.89	113	49.78	132	62.26	346	55.54
Spending	No	83	45.11	114	50.22	80	37.74	277	44.46
Total		184	29.53	227	36.44	212	34.03	623	100.00
Chi-squared Test			Value		df			Sig. (2-sided)	
Pearson Chi-Squared			6.963[a]		2			.031	
Symmetric Measures			Value		Approx. Sig.				
	Phi		.106		.031				
	Cramer's V		.106		.031				

Based on Table 4.32, out of 184 Malay respondents, 83 (45.11%) of them neglected their actual spending while 101 (54.89%) of them monitored their actual spending. For Chinese, out of 227 respondents, 114 (50.22%) of them neglected their actual spending while 113 (49.78%) of them monitored their actual spending. For Indian and Other ethnicity, out of 212 respondents, 80 (37.74%) of them neglected their actual spending while 132 (62.26%) of them monitored their actual spending.

The finding also indicated that the probability of the chi-square test statistic (χ^2=6.963) was $p = 0.031$, less than the alpha level of significance of 0.05. The value of Cramer's V (0.106) indicated a positive and statistically significant relationship between Ethnicity and Monitoring Spending.

Table 4.33

Chi-Square Test and Symmetric Measures for Monitoring Spending against Education Level

		Education Level					
		Primorless		SecondAbove		Total	
		N	%	N	%	N	%
Monitoring	Yes	44	32.35	302	62.01	346	55.54
Spending	No	92	67.65	185	37.99	277	44.46
Total		136	21.82	487	78.17	623	100.00
Chi-squared Test		Value		df		Sig. (2-sided)	
Pearson Chi-Squared		37.873[a]		1		.000	
Symmetric Measures		Value		Approx. Sig.			
	Phi	.247		.000			
	Cramer's V	.247		.000			

Based on Table 4.33, out of 136 respondents who had completed their Primary education, 92 (67.65%) of them neglected their actual spending while 44 (32.35%) of them monitored their actual spending. Out of 487 respondents who had completed their Secondary education and above, 185 (37.99%) of them neglected their actual spending while 302 (62.01%) of them monitored their actual spending.

The finding also indicated that the probability of the chi-square test statistic (χ^2=37.873) was $p = 0.000$, less than the alpha level of significance of 0.05. The value of Cramer's V (0.247) indicated a positive and statistically significant relationship between Education Level and Monitoring Spending.

Overall, to answer research question 2; are there any significant relationships between demographic factors and financial planning factors, cross-tabulation was used. The values of r squared, p-values and Cramer's V indicated that there were variables which were positively correlated. First, the correlations between age and comfortable retirement and monitoring spending were positively correlated and statistically significant and the relationships between the variables were moderate. Second, the correlations between gender and asset ownership, comfortable retirement, duration savings to last, estimation retirement savings and financial planning ways were positively correlated and statistically significant and the relationship between gender and asset ownership was strong and the rest of the relationships between the variables were moderate.

Third, the correlations between education level and asset ownership, comfortable retirement, durations savings to last, estimation retirement savings, financial planning ways and monitoring spending were positively correlated and statistically significant and the relationship between comfortable retirement and education level was strong and the rest of the relationships between the variables were moderate.

Lastly, the correlations between ethnicity and comfortable retirement, duration savings to last and monitoring spending were positively correlated and statistically significant and the relationships between the variables were moderate. The rest of cross-tabulations indicated weak and statistically insignificant relationships among financial planning variables and demographic variables.

Analysis of Research Questions.

Research question 3

b) What are the determinants (demographic, financial literacy, financial attitude, financial education) that significantly determine the financial retirement planning?

Multinomial logistic regression was used to answer this research question. SPSS software was used to run the analysis. This analysis had 623 independent observations with 15 independent variables, and the dependent variable had three categories.

The independent factors which were included in this study included demographic factors (age, gender, ethnicity, marital status, and education level), financial literacy factors (ownership of assets, source of income, and minimum monthly expenses), financial attitude factors (dependency, financial status, comfortable retirement, duration saving to last, estimation saving for retirement, and monitor actual spending) and financial education factors (financial planning ways). The dependent variable was a dummy variable: budget spending (1: Often, 2: Occasionally, 3: Never). Table 4.34 indicates the descriptions of variables used in the analysis.

Table 4.34
Description of variables

Variable	Description
Age_65andAbove	Dummy variable (1 if respondent is 65 and more; 0 if otherwise)
Female	Dummy variable (1 if respondent is female; 0 if otherwise)
Ethnicity	Dummy variable (1 if respondent is Malay; 2 if respondent is Chinese; 3 if respondent is Indian or others)
Married	Dummy variable (1 if respondent is married; 0 otherwise)
Education level	Dummy variable (1 if respondent has primary or less education, 0 if respondent has secondary and above level education)

Ownership_of_Asset	Dummy variable (1 if respondent has vehicle either/or at least a car or motorcycle; 2 if respondent has either/or a house, shop, land or office property; 3 if respondent has both vehicle and property; 0 if respondent does not own any asset)
Duration_SavingtoLast	Dummy variable (1 if respondent expects his saving to last within 1-10 years; 2 if respondent expects his saving to last for more than 11 years; 0 do not expect their saving will last)
SourceofIncome	Dummy variable (1 if respondent has productive income like either/or income from own work, income from working spouse, interest/dividend from savings and investments or rental from properties; 2 if respondent has non-productive income like either/or remittance from children, annuity, own pension, spouse's pension or welfare; 3 if respondent has both productive and non-productive income)
MthExp_1000above	Dummy variable (1 if respondent's monthly expenses is RM1000 and above; 0 otherwise)
Dependency	Dummy variable (1 if respondent has direct dependent like either/or spouse, children or grandchildren; 2 if respondent has indirect dependent like either/or parents/parents-in-law, or siblings; 3 if respondent has both direct and indirect dependency; 0 if respondent does not have any dependency)
Financial_Status	Dummy variable (1 if respondent gets along Financially worse compared to five years ago; 0 if respondent gets along financially same compared to five years ago) Estimation_RetrmntSaving Dummy variable (1 if respondent have tried to figure out how much he needs to save for retirement; 0 otherwise)

Comfortable_Retrmnt	Dummy variable (1 if respondent is not at all confident or somewhat confident that he will have enough money to live comfortably throughout his retirement years; 2 if respondent is very confident that he will have enough money to live comfortably throughout his retirement years; 3 if respondent does not think about having enough money to live comfortably throughout his retirement years as his family supports him; 4 if respondent does not think about having enough money to live comfortably throughout his retirement years as he is on pension/welfare)
Monitor_Spending	Dummy variable (1 if respondent keeps track of his actual spending; 0 if respondent neglects his spending)
Finan_Plan_Ways	Dummy variable (1 if respondent uses calculators or worksheets that are computer or Internet-based or he plans on his own to figure out how much is needed for household; 2 if respondent talks to family and relatives or to co-workers or friends or respondent consults a financial planner or advisor or an accountant or attends a course or seminar to teach him to figure out how much is needed for household; 0 if he does not figure out how much is needed for household)
Budget_Spending (**DV**)	Dummy variable (1 if respondent sets budget for his spending often; 2 if respondent sets budget for his spending occasionally/rarely; 3 if respondent never set budget for his spending)

Model fitting for multinomial logistic regression. Firstly, this study examined the -2 log likelihood in order to see if the model with predictor variables was better than the model Intercept Only. “Intercept Only” describes a model that does not control for any predictor variables and simply fits an intercept to predict the outcome variable. "Final" describes a model that includes the specified predictor variables and has been arrived through an iterative process that maximises the log likelihood of the outcomes seen in the outcome variable.

By including the predictor variables and maximising the log likelihood of the outcomes seen in the data, the "Final" model should improve upon the "Intercept Only" model. This can be seen in the differences in the -2(Log Likelihood) values associated with the models as shown in Table 4.35.

Table 4.35

Model Fitting Information

Model	Model Fitting Criteria -2 Log Likelihood	Likelihood Ratio Tests Chi-Square	df	Sig.
Intercept Only	1248.043			
Final	839.040	409.003	50	.000
Pseudo R-Square	Cox and Snell	Nagelkerke		McFadden
	0.481	0.554		0.324

The chi-square was 409.003 with degree freedom of 50 and respective p-value was 0.000. Since the p-value for the model was less than alpha, $\alpha=0.05$, the null hypothesis should be rejected. Therefore, it indicated that at least one of the regression coefficients in the model was not equal to zero.

The highest value in Pseudo R-Square belonged to Nagelkerke which was 0.554 followed by Cox and Snell and McFadden which was 0.481 and 0.324 respectively. However, as stated earlier in this analysis Cox and Snell was better since it had the lowest mean compared to Nagelkerke and McFadden.

Odd ratios. This section consists of the analysis of odds ratios for each independent variable included in the model. Table 4.36 indicates the analysis of odds ratio.

Table 4.36

Analysis of Odds Ratio

Budget_Spending	Odds Ratio	Std Err	z	P>z	95% CI Lower	95% CI Upper
Often relative to Never						
Age_64Below	1.352	.316	.910	.340	.728	2.510
Male*	.413	.323	7.511	.006	.219	.777
Malay	.593	.363	2.071	.150	.292	1.208
Chinese	.594	.329	2.497	.114	.312	1.133
Unmarried	1.032	.335	.009	.926	.535	1.990
SecondAbove	1.297	.398	.426	.514	.594	2.828
Asset_Vehicle	1.073	.346	.041	.839	.544	2.116
Asset_Property	1.738	.614	.812	.368	.522	5.789
Both Vehicle and Property	.491	.419	2.872	.090	.216	1.118
Duration_SavingtoLast (1-10years)	2.623	.577	2.793	.095	.847	8.128
Duration_SavingtoLast (11 and above years)*	4.577	.650	5.477	.019	1.280	16.361
Productive_income*	.345	.393	7.302	.007	.160	.747
Non-Productive income	.904	.366	.076	.783	.441	1.853
MthExp_Rm1000 below	.717	.325	1.052	.305	.379	1.355
Direct dependency	1.915	.387	2.816	.093	.897	4.091
Indirect dependency	3.293	.730	2.663	.103	.787	13.781
Both dependency*	17.081	1.234	5.291	.021	1.522	191.739
FinancialStatus_Same	.605	.294	2.932	.087	.340	1.075
NeverEstimate_Retrmnt Saving	2.039	1.565	.207	.649	.095	43.776
ComfyRetire_Not confident	.766	.557	.230	.632	.257	2.282
ComfyRetire_Very confident	.326	.732	2.347	.126	.078	1.368
ComfyRetire_Family	.695	.406	.804	.370	.313	1.540

Support						
Neglect_spending*	.033	.356	91.987	.000	.016	.066
FinanPlanWays_Indiv	5.224	1.567	1.113	.291	.242	112.706
FinanPlanWays_Family	343.226	2.012	8.422	.004	6.654	17703.553
FriendCounseling*						
Occasionally relative to Never						
Age_64Below*	2.084	.308	5.698	.017	1.140	3.808
Male*	.362	.318	10.162	.001	.194	.676
Malay	.851	.359	.202	.653	.421	1.720
Chinese	1.266	.334	.499	.480	.658	2.437
Unmarried	.953	.334	.020	.886	.495	1.835
SecondAbove	1.003	.405	.000	.995	.453	2.219
Asset_Vehicle	1.149	.348	.159	.691	.581	2.272
Asset_Property	2.362	.590	2.120	.145	.743	7.508
Both Vehicle and Property	.842	.404	.180	.671	.381	1.861
Duration_SavingtoLast (1-10years)	2.192	.614	1.631	.202	.657	7.307
Duration_SavingtoLast (11 and above years)	2.470	.690	1.716	.190	.638	9.555
Productive_income*	.418	.406	4.634	.031	.189	.925
Non-Productive income	.862	.365	.165	.684	.422	1.763
MthExp_Rm1000 below	.680	.326	1.404	.236	.359	1.288
Direct dependency*	2.175	.377	4.251	.039	1.039	4.552
Indirect dependency	1.838	.754	.652	.419	.420	8.048
Both dependency*	127.099	1.044	21.542	.000	16.429	983.295
FinancialStatus_Same	.934	.299	.053	.818	.520	1.677
NeverEstimate_Retrmnt Saving	12.804	1.602	2.535	.111	.555	295.508
ComfyRetire_Not confident	.346	.581	3.336	.068	.111	1.081
ComfyRetire_Very* confident	.151	.759	6.193	.013	.034	.670
ComfyRetire_Family Support*	.369	.391	6.494	.011	.171	.794
Neglect_spending*	.044	.332	88.641	.000	.023	.084
FinanPlanWays_Indiv						

FinanPlanWays_Family	18.152	1.596	3.297	.069	.794	414.755
FriendCounseling*	1830.839	2.054	13.380	.000	32.693	102529.678

Note:
* $p< 0.05$

Table 4.36 depicts the value of odds ratio, standard errors, z-test results, and associated p-values as well as the 95% confidence interval of the coefficients. The table revealed that for Females relative to Males, the relative risk for those who set budgets for their spending Often and Occasionally compared to Never is expected to increase by a factor of 0.413 and 0.362 respectively given the other variables in the model were held constant. In other words, Female elderly individuals were more likely than Male elderly individuals to set budget for their spending Often and Occasionally over Never.

Finding also indicated that for saving duration to for 11 years and above relative to saving duration to last for less than 11 years, the relative risk for those who set who set budgets for their spending Often compared to Never is to increase by a factor of 4.577 given the other variables in the model were held constant. In other words, elderly individuals who estimated their saving will be last for 11 years and above were more likely to set their budget target for spending Often compared to those who estimated their budget saving will last for less than 11 years.

The log odds for having Both of Productive and Non-Productive Income relative to Productive_Income, the relative risk for those who set budgets for their spending Often and Occasionally compared to Never was expected to increase by a factor of 0.345 and 0.418 respectively given the other variables in the model were held constant. In other words, those elderly individuals who had both of productive and non-productive income, they were more likely to set their budget target for spending Often and occasionally compared to those who had productive income.

The log odds for Both_Dependency relative to No_Dependency, the relative risk for those who set budgets for their spending Often and Occasionally compared to Never was expected to increase by a factor of 17.081 and 127.099 respectively given the other variables in the model were held constant. In other words, those who had both of direct and indirect dependency like either/or parents, parents-in-law, siblings, spouse, children or grandchildren were more likely to set their budget target for spending often compared to those who did not have any dependency.

Another finding which was discovered in this analysis was that those elderly individuals who had direct dependency like either/or spouse, children or grandchildren were more likely to set their budget target for spending Occasionally compared to those who did not have any dependency with the odds ratio for Direct_Dependency relative to No_Dependency, the relative risk for those who set budgets for their spending Occasionally compared to Never was expected to increase by a factor of 2.175 given the other variables in the model were held constant.

An interesting finding found in this analysis was for FinanPlan_FamilyFriendsCounseling relative to No_FinancialPlanning. The relative risk for those who set budgets for their spending Often and Occasionally compared to Never was expected to increase by a factor of 6.654 and 1830.839 respectively given the other variables in the model were held constant. It indicated that those who talked to family, relatives, co-workers, friends, consult financial planners or advisors or accountants or attended any courses or seminars to teach them to figure out how much was needed for household were more likely to set their budget target for spending Often compared to those who did not have any financial planning.

Those elderly individuals who were aged 64 and less were more likely to set budget target for spending occasionally compared to those who were aged 65 and above as the finding indicated that for those who were Age_64andLess relative to those who were Age_65andMore, the relative risk for those who set budgets for their spending Occasionally compared to Never was expected to increase by a factor of 2.084 given the other variables in the model were held constant.

Another interesting finding which in this analysis was those elderly individuals who did not think about having enough money to live comfortably throughout their retirement years as there were on pension/welfare are more likely to set their budget target Occasionally compared to those elderly individuals who were very confident that they will have enough money to live comfortably throughout their retirement years and those who did not think about having enough money to live comfortably throughout retirement years as their families support them; the log odds would be expected to increase by a factor of 0.151 for ComfyRetire_Pension/Welfare relative to ComfyRetire_Veryconfident and 0.369 for ComfyRetire_FamilySupport relative to ComfyRetire_Pension/Welfare given the other variables in the model were held constant.

Another interesting finding found in this analysis was elderly individuals who neglected their actual spending were more likely to set their budget target for spending Often and Occasionally compared to those who monitored the spending by keeping track of their actual spending; the log odds for Monitor_spending relative to Neglect_spending, the relative risk for those who set budgets for their spending Often and Occasionally compared to Never was expected to increase by a factor of 0.033 and 0.044 respectively given the other variables in the model were held constant.

Based on Table 4.36, male, duration_savingtolast (11andaboveyears), productive income, non-productive income, direct dependency, both dependency, neglect spending, finanplanways_familyfriendscounseling, age_64below, comfyretire_veryconfident, and comfyretire_familysupport significantly influenced how often elderly individuals set budget target for their spending. Malay, Chinese, unmarried, secondabove, asset vehicle, asset property, both vehicle and property, duration_savingtolast (1-10years), non-productive income, mthexp_RM1000below, indirect dependency, financialstatus_same, neverestimate_retrmntsaving, comfyretire_notconfident, and finanplanways_individuals were not significant in influencing how often elderly individuals set budget target for their spending.

Multinomial logistic regression was used to answer research question 3; what are the determinants (demographic, financial literacy, financial attitude, financial education) that significantly determine the financial retirement planning? Overall, 25 variables were included in the analysis of odds ratio and nine variables were found to be significant. An interesting finding in this analysis was, it was found that female elderly individuals were more likely than male elderly individuals to set budget for their spending often and occasionally over never. Besides that, it was also proven that elderly individuals who estimated their saving will be last for 11 years and above were more likely to set their budget target for spending often compared to those who estimated their budget saving will last for less than 11 years.

The finding also showed that those elderly individuals who had both of productive and non-productive income, they were more likely to set their budget target for spending often and occasionally compared to those who just have productive income. Furthermore, those who had both of direct and indirect dependency like either/or parents, parents-in-law, siblings, spouse, children or grandchildren were more likely to set their budget target for spending often compared to those who did not have any dependency.

In addition, those elderly individuals who had direct dependency like either/or spouse, children or grandchildren were more likely to set their budget target for spending occasionally compared to those who did not have any dependency. Moreover, those who talked to family, relatives, co-workers, friends, consult financial planners or advisors or accountants or attended any courses or seminars to teach them to figure out how much was needed for household were more likely to set their budget target for spending Often compared to those who did not have any financial planning.

Findings also depicted that those elderly individuals who were aged 64 and less were more likely to set budget target for spending occasionally compared to those who were aged 65 and above. Another surprising finding which was found this analysis was those elderly individuals who did not think about having enough money to live comfortably throughout their retirement years as they were on pension or welfare were more likely to set their budget target occasionally compared to those elderly individuals who were very confident that they will have enough money to live comfortably throughout their retirement years and those who did not think about having enough money to live comfortably throughout retirement years as their families support them.Another surprising finding found in this analysis was elderly individuals who neglected their actual spending were more likely to set their budget target for spending often and occasionally compared to those who monitor the spending by keeping track of their actual spending. The rest of the variables were not significant in influencing how often elderly individuals set budget target for their spending.

Interview

As mentioned earlier, the second part of this study involved interview. Interview was carried out among 10 participants. This sample size was sufficient as Crouch and McKenzie (2006) proposed that less than 20 participants in a qualitative study was sufficient for a researcher to maintain a good relationship and to probe information. In this study, the 10 participants were specifically chosen based on the fixed criteria from Klang Valley.

Table 4.37

Demographic details of participants

Participant experience	**Gender**	**Age**	**Occupation**	**Working**
Participant 1	Female	63	Deputy Secretary General at Ministry of Management Health ,	In charge of management administrative matters, human resource matters including trainings for general staff also for paramedics
Participant 2	Male	62	Maintenance Mechanic at Kuala Lumpur Glass Manufacturer Co Sdn bhd	Incharge of removing defective parts by dismantling devices; using hoists, cranes, and hand and power tools, examining form and texture of parts.
Participant 3	Female	61	Marketing Executive at Konsortium Logistik Berhad	In charge of servicing existing and developing new customers on any demands and also responsible for executing marketing plans to achieve sales targets.

Participant 4	Male	61	Bank manager at Deutsche banl (foreign bank)	In charge of monitoring sales target and reporting any matters to head office and also meet customers and sttle any problem or complaints.
Participant 5	Male	70	Insolvency Consultant at NTC Insolvency Advisory Sdn bhd	In charge of advising people on how to avoid bankruptcy
Participant 6	Female	66	Own business	Sells China sets and travel agent organises trips to local and foreign places
Participant 7	Female	59	Production Operator at Panasonic company	Handles the machine which produces equipment; troubleshoots under supervision for complex machine problems
Participant 8	Female	57	Production Operator at Watertech company	Handles the operations of water treatment equipment company and waste effluent treatment
Participant 9	Female	55	Accountant at LC Sdn Bhd	In charge of accounts and exports; ensures customers settle their payments and also deals with preparing quotations for customers.
Participant 10	Male	75	Professor/ Senior Research Fellow at University of Malaya	Teaches subjects related to management, planning, policy, and principal ship and advices students.

This study was carried out to answer the following research question:

a. What are the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia?

This part emphasises on qualitative analysis, semi-structured interview. The authenticity of participants' words was maintained as much as possible. However, several grammatical errors were corrected to ensure the findings were written in proper language. For every interview, the questions were progressively re-worded to explore themes that emerged from prior interviews and to keep track closely on the information given by participants (Rubin & Rubin, 2011). At the end of every direct translation from interview transcripts for every theme, the reference was given (see Appendix F) For instance, in the reference, P1; 94-95, the first alphabet 'P' referred to Participant and followed by number '1' referred to Participant 1. Number 94-95 represented the number of lines where the quotation started and ended in the transcript. This section presented the major themes that derived from the interviews with 10 participants. However, it was worth mentioning here that the inductive thematic analysis helped researcher to come up with new themes. There were five main themes emerged from the data as a result of such analysis with sub-themes as:

1. Financial planning before retirement
    a) Financial planning for future
    b) Financial planning for children's wellbeing
2. Mastering financial literacy
    a) Importance of money
    b) To retire with financial freedom

c) Millennial generation lack financial planning

d) Financial discipline

e) Maintain social status

3. Determinants associated with financial retirement planning

a) Goal setting

b) Awareness

c) Exposure

d) Socioeconomic status (SES)

4. Ways to expose financial retirement planning conceptual model to Malaysians

a) School

b) Media

c) Policy implementation

d) Workshops/Seminars/Conference

e) Publication

5. Challenges

a) Rejection of idea

b) Unconcern for financial retirement planning

c) Criticise the idea

d) Promoting the idea

In addition, the impacts of demographic factors, financial attitude factors, financial literacy factors and financial education factors on financial retirement planning were also identified. Most importantly, the qualitative findings were synthesised in order to propose a financial retirement planning conceptual model suitable to Malaysian context and also the challenges which may occur in the processes of exposing the proposed conceptual model were explained. In the following, these major themes were further explicated. Interview excerpts derived during interviews were included in the explanation of each theme.

Financial planning before retirement for financial retirement planning. Financial planning before retirement and the urge for financial retirement planning was a major theme in this study as the data from participants indicated that it was essential for individuals to plan their finance matters well before they retired for their future. The issue of financial planning before retirement and the urge for financial retirement planning was further classified into two main subthemes: financial planning for the future and financial planning for children's wellbeing.

Financial planning for the future. Participants mentioned that they had started planning their financial matters while they were working for their future. Participant 8 informed, "I wanted to plan for my retirement despite of having my monthly commitment like house loan and other necessary expenses but I could not save a lot but, I managed to save a bit" (P8;26-28). However, certain participants admitted that in the beginning of their career, they did not manage to save up money because they when they started working, their salaries were low with a lot of commitments. The participants also agreed that their salaries were just nice to spend for their daily expenses and to pay off their utility bills. Participant 2 claimed that he got low income with a number of commitments:

> Initially when I started working back in 1974 in a private company, my pay was only Rm500 and I had to plan well as I had my monthly commitment RM300 for my house loan and balance RM200 I will need to spend carefully because I had to pay for my water bill, electric bill and etcetera within RM200 until I get my next salary
>
> (P2; 46-49).

Participant 5 shared that even though he had the idea to plan for his retirement, he could not fulfill his plans as his salary was just enough to settle his monthly commitments.

> I had ideas to plan for my retirement the day I started working; however, I could not follow my ideas as my pay was just sufficient to settle my car loan, house loan, my personal insurance, my utility bills and my daily expenses
>
> (P5; 41-43).

The above statements indicated participants had the ideas of planning for their retirement despite of having financial difficulties. However, certain participants with higher pay did not find it difficult to plan for their retirement from the day they started working. Participant 1 claimed that "From day one of work, I started planning for my retirement…In fact, while I was working, I invest in properties for my future and set aside savings my future every month without fail" (P1;108-109).

Participant 3 added, "I have planned for my retirement. I took up insurance policy and I invested in unit trust. I also played share market… I allocated that money as my extra savings" (P3;24-25). On the other hand, Participant 10 said that he was getting enough paid to plan for his retirement; however, he did not really plan for his retirement as he was confident with his retirement because he will be getting his pension monthly. He shared, "My salary was sufficient for me to plan my retirement and I also was confident with my retirement; unfortunately I did not do so as I felt safe being a government servant, whereby I will have my pension coming in" (P10; 53-55). To add on, participant 4's income was good and he set up his own business to generate income and planned his finance well for his retirement. Participant 4 informed:

While I was working, my pay was good and I had the chance to start up a printing business as my retirement plan. While working in bank, I took up insurance policy, I invested in unit trust and I also was active in share market. I well-planned everything for my future

(P4; 70-72).

Furthermore, participant 6 also started own business as a way to plan for future and she also invested in gold and kept aside savings for the future use. Participant 6 claimed:

…The main reason for me to start up my own business was to save up money for me especially when I get older… I invested my money in gold and Iallocated money for myself in the bank so that I can use the money in the future

(P6; 19-21).

Participant 9 mentioned that she began to plan for her retirement ahead of time while she was working. She invested in many things that can be financially useful upon her retirement. Participant 9 shared:

I started my retirement planning earlier since the day I started working. The first thing I did was to invest in mutual fund at Public Bank and I took up insurance for myself, I invested in share market, I invested in properties like condominium and house and I also save up monthly for myself

(P9; 27-30).

The statements from participants indicated that most of them had started their financial planning at the earlier stage when they were working regardless of their levels of income. This included both government and private sectors employees.

Financial planning for children's wellbeing. Most of the participants stated that they allocate their salary for their children's education and expenses even though some of them had very little savings for themselves. They mentioned that they can help their children in future upon their retirement with their savings that they allocate for their children. Regarding financial planning for children's well-being, participant

2 stated that he worked extra hours even on public holidays to get extra income and saved up for his children. Participant 2 claimed:

> Even though my salary was just nice to maintain a simple life, I gave importance for my children. I will work on public holidays to get double pay so that I can get extra income and that income I will save up for my children… Every month I will keep aside some amount of money for all my children despite of limited amount of money for my own expenses
>
> (P2; 76-78; 81-83).

Participant 5 said that for him, his children's education was vital and somehow he will work extra hours to earn extra income to support his children. Participant 5 shared:

> My children's education is important for me. Somehow, I will work extra hours to get more income so that I can support my three children. I also will set aside some allocations for them every month. I also took up insurance for three of them when they were young
>
> (P5; 47-50).

Participant 8 mentioned that even with low salary, she never failed to provide money for his children and in addition she also worked extra hours to generate extra income to support her children who were studying. Participant 8 said:

> Even though my salary was very low, I never failed to provide money for my children. For now, I do massage service to get extra income to support both of them who are in college and I also have a bit of savings for four of my children
>
> (P8; 98-101).

Even though certain participants had financial constraints, they never failed to allocate money for their children's wellbeing. Those who earned better tend to provide more financial aids for their children and they also had good financial retirement planning for themselves. Participant 1 stated, "…I also started saving money for my five children and investing in properties for all of them… I also have bought five houses for my five children and I also have savings for all them" (Participant 1;195-196;197-199).

Being a single mother did not stop Participant 3 from allocating money for her children. Participant 3 stated that, "Despite of being a single mother, I took up insurance and allocated money for my children while I was working. In order to ensure that I can save up for my children's education, I was very careful with my spending" (P3;120-122).

Furthermore, participant 4 started saving up for his only daughter ahead of time and now he is happy as he can support her financially. Participant 4 said that, "I have only one daughter so earlier itself I already started saving for her education in future and now she is studying at a private college and even now I am supporting her financially" (P4;68-69).

Moreover, despite of being a single mother Participant 6 did her own business in order to save money for her children and to support them financially. Participant 6 explained:

> I have four children and I do my own business and save money for all of them. I do not spend unnecessarily because I need to provide financial aid for my children. One daughter is studying and I am supporting her financially despite of being a single mother
>
> (P6; 26-29).

On the other hand, participant 7 had savings for her children and she only gave them in case of emergency because she said that nowadays children do not know how to manage money wisely. Participant 7 said:

> I have some savings for my three children; however, all of them are working now. So I will keep that savings for them. In case of any emergency, I will give them the savings that I have allocated for them knowing that nowadays children do not really know how to save up money for future
>
> (P7; 103-106).

Participant 9 shared that she started planning for her children since she started working. She invested in financial matters for her daughters and she was confident that her daughters did not need to worry about financial matters because she has done all the necessary things for her children. Participant 9 explained:

> I really plan for my children very well since the day I started working. I have joint accounts of public mutual funds with all my three daughters. I also took up medical, education and life insurance policies for my three daughters. Every month I will set aside some amount of money for my retirement and also for my daughters
>
> (P9; 36-40).

Participant 10 mentioned that he has done all the necessary things for his children's wellbeing and he has savings but he only gives them when it is necessary because he claimed that nowadays generation is not good in planning their finance. He said:

> It is very essential to invest in assets while working. Now, I have divided all the properties to my children for free of charge. I also have additional savings for my children. Well, you know nowadays younger generation is not so good in planning finance. So, I will give money to my children when they need
>
> (P10; 65-68).

Overall, the statements from the participants showed that those who had better income, they planned for their children's wellbeing very well like investing money in buying assets for their children, taking up insurance for their children, investing in public mutual since young for their children and allocating money for their children for their future. So, even upon their retirement, they can help their children.

Importance of mastering financial literacy. Mastering financial literacy contributes towards financial planning for retirement. Individuals who have financial literacy will have the ability to use financial resources well to plan for their retirement. Thus, this is also an essential theme in this study. The following discussion comprises of five main subthemes: importance of money, to retire with financial freedom, millennials, financial discipline and maintain social status.

Importance of money. All the participants said that it was important to have financial literacy like to have understanding on how money works in real world, how to earn or make money, how to manage money, how to invest money properly and how to even donate money to help others. Participant 1 mentioned three main principles of money which were very important and every individual should know the principles. Since everything needs money, one should be very smart in dealing with money. She said:

> There are three main principles when it comes to money; how you earn, how you spend and how you save. In order to master these three principles financial literacy is essential. Everything that you do requires some amount of money and you need to have money in order for you to cope up with current living standards. I always feel happy and satisfied when I donate money to the needy with the extra money that I have accumulated
>
> (P1; 160-163).

Participant 3 mentioned that financial literacy was also important as individuals need to know how to manage money wisely because depending solely on pension or EPF was risky. Participant 3 said, “It is definitely risky to purely depend on pension or EPF upon retirement. I had the knowledge to save up at least 30 per cent of my income monthly when I was working…” (P3; 55-56).

According to the statement from Participant 3, a person regardless of from government or private sector who has financial literacy will know how to work smart and earn or save extra as one should not fully depend on pension or EPF.

According to Participant 6, individuals with financial literacy education can plan their retirement very well as they know due to the current economic situation, the prices of things have risen tremendously. She was also willing to attend financial courses to enhance her financial literacy regardless of their age. She said:

> One should know how to manage his or her salary well as nowadays the prices of things have risen up…If there is a chance for me to attend financial courses at this age, I do not mind because I can increase my financial awareness
>
> (P6; 77-78).

Participant 7 mentioned that it was important to master financial literacy so that a person can be able to know how to deal with financial situations and below is the excerpt:

> One of the effects of mastering financial literacy is that one can know how to deal with financial situations that will occur often in our daily life. For instance, one should be wise in managing his salary well every month by spending smartly…
>
> (P7; 66-69).

According to Participant 8, financial literacy was vital because people needed it to plan for their retirement and to manage money daily. She explained, "Definitely financial literacy is important because one can plan his retirement well or not it will be very difficult to survive without having sufficient money upon retirement. Managing money monthly requires some financial knowledge." (P8; 61-63). Besides that, Participant 9 said that, "Nowadays, investing in assets is a big commitment as the prices of assets have increased. Thus, one should have financial literacy in order to know how to to know how money really works. We need to know how to invest in assets smartly and deal with other financial situations properly" (P9; 66-69).

Overall, in order for an individual to know how to deal with financial situations in their daily life, financial literacy is essential. By gaining proper financial literacy, one can be able to deal with financial commitments wisely and knows when and how to invest in assets especially with current economic situation. 6

To retire with financial freedom. Participants mentioned that it is important to retire with financial freedom. It means that, before individuals retire they should have settled all their debts and should not have any financial commitments upon retirement. Participant 3 said, "…I saved up as much as I can. I cut down my friends and entertainments which are not necessary and now I have settled all my debts before I retire" (P3;249-251). To add on, Participant 1 mentioned:

> "… If individuals' salary is small, they really need to plan properly so that they do not have a lot of debts upon retirement. Those who do not have financial planning knowledge will tend to have a lot of debts during their retirement period… That time my salary was RM3000 only but I successfully managed my debts well and I also had savings. Managing your debt is an art."
>
> (P1; 186-189).

Participant 3 stated that, it is essential to settle loans and debts and retire with financial freedom because upon retirement whatever savings that individuals have can be spent for living the life they desired. She said:

> Before retire all the loans and other debts should be settled. I retired with financial freedom. I had no debts when I retired and I had sufficient savings and that savings can last long. Everyone should retire without debts because after retirement, whatever savings that we have for ourselves can be used for travelling, daily expenses and of course for medical expenses
>
> (P3; 251-254).

Generally, the opinions from participants clearly showed that those retires who would want to live peacefully upon retirement, should work hard to plan their retirement well. They must make sure that they are financially free before they retire, in another word they should not have any debts or a lot of commitments after they retire. Upon retirement they need to enjoy their life like travelling. They should also be prepared financially to spend money for their medical expenses. Thus, they need to save up and have sufficient savings before retirement.

Millennials. Millennials are also referred as Generation Y. Millennials are born within in the early 1980s to early 2000s. Participants' children belonged to millennials generation. All the participants stated that this generation had a very poor financial planning due to their lifestyle and ended up with a lot of debts. Participant 1 mentioned:

> "…I do not depend on my children for any financial aids but until now they depend on me. All my children are working but at times they ask me for money to settle their car money or for other things. The main reason why they cannot be independent is because of their lifestyle… They do not give importance to saving up money"
>
> (P1; 167-169;170).

To add on, Participant 2 said that nowadays generation spent unnecessarily and did not know how to save up money for future. He explained, "Nowadays children like to spend unnecessarily… These children just love to eat outside. They just do not know how to save money for their future" (P2; 120-121; 123-125). Additionally, Participant 3 mentioned that lifestyle affected younger generation in saving for their future. She said, "They spend unnecessarily because they do not think about saving for their future. Many husbands got influenced by wives who love to spend lavishly especially when they go for shopping. They buy branded things only which can cost a bomb" (P3;166-168).

Furthermore, Participant 4 mentioned that younger generation should learn from young because many of them spent their salary without being aware of their financial status and ended up with zero savings at the end of the month. Participant 4 said,

> "Actually younger generation should learn from young because nowadays younger generation does not think about retirement. They spend their salary lavishly and at the end of the month they would not have any savings in their bank accounts"
>
> (P4; 140-142).

In addition, Participant 5 explained that younger generation tend to spend lavishly by using credit cards. This resulted in having zero savings and accumulating debts. Therefore, they failed to plan their retirement because when they retire, they retire with debts. Participant 5 said:

> Younger generation spends lavishly every time they get their salary. The current trend is to use credit cards. They use credit cards to shop for branded and expensive things. Then, they end up buying luxury cars and eat in expensive restaurants. All these result in not having savings at the end of the month and accumulate a lot of debts. They fail to plan for their retirement since the day they start working and when they retire they will have a lot of debts
>
> (P5; 81-85).

Overall, most respondents stated that their children who were the millennials did not have the interest to save up for their future as they spend lavishly. This younger generation also did not have financial literacy in order for them to be aware of their financial status and plan for their retirement.

Financial discipline. Financial discipline is essential because individuals who have financial discipline will be able to monitor spending and save up according to their monetary goals. To achieve the goal, they should be willing to obey rules. For individuals to practice financial discipline, they must have financial literacy. Participant 5 explained:

> A person who does not spend unnecessarily has some financial discipline. One should have the discipline to save up money to achieve their monetary goals… Although price of things have risen, if you have financial literacy and financial discipline you can somehow manage your monthly expenses and save up for retirement
>
> (P5; 184-185; 187-189).

Participant 5 emphasised that in order to have financial discipline, one should have financial literacy to plan their monetary goals. Once he has the goals to achieve, financial discipline comes along.

Maintain social status. Financial literacy is essential to plan for retirement. When one has financial literacy, proper financial planning can be undertaken or not one can end up in disappointments upon retirement. Regarding maintaining social status, Participant 10 shared:

> Financial literacy is essential as it contributes to proper financial planning for retirement. It leads to proper financial plan that will enhance your image. Individuals without mastering financial literacy can be psychologically down especially upon retirement because they will need to deal with a lot of financial debts at the old age. Financial literacy is also important because individuals who have financial literacy are able to maintain whatever savings and assets that they have saved and invested in before they retire or not they might end up using up all of their savings and selling all of their assets that they saved and bought while they were working
>
> (P10; 85-91).

Overall, based from the opinions from participants, mastering financial literacy lead to proper financial retirement planning and everyone needed to master it. Everyone knew that money is important; so it should be earned and saved in a proper way. Those who wanted financial freedom need to have financial literacy to plan things well so that they can settle all their debts before their retirement. The millennials needed to be more aware on their expenses so that they can save up and plan for retirement properly. One should have the financial discipline in order to plan for retirement. Financial literacy was also important as individuals need to maintain social status.

Impacts of demographic factors on financial retirement planning. Demographic factors like gender, age, education background play important roles in financial retirement planning. However, the level of importance can be found out based on the opinions of participants who took part in this study. The following discussion comprises of three main subthemes: gender, age and education level.

Gender. Men and women have the abilities to either save up for their retirement or not to plan anything for their retirement. However, women are better in saving for the future. Participant 4 shared, “Women are more family oriented than men. They are more concerned about their family and also the expenses. Even housewives will tend to save up from the money given to them by their husbands or children" (P4;93-95). In addition, Participant 1 shared:

> Overall, women are better in saving up money than men. Men tend to have more friends outside and they spend more money for entertainments like eating outside and hanging out with friends in malls… When they get married and start another family or more, they face financial constraints and end up by having poor financial retirement planning. Women on the other hand they are more family-oriented… So, they are better in saving up for the future
>
> (P1; 283-285; 286-287).

To add on, Participant 2 mentioned that it all depends on the individuals themselves. He said, "Actually it all depends on individuals. Certain men are good in planning their finance but their spouses might be spendthrift and vice versa (P2; 130-131). Participant 5 emphasised on how his wife who was a housewife was good in financial planning compared to him and he also explained that men's lifestyle was such that they failed to plan their finance. He said:

> Women are better in financial planning. For example, my wife is a housewife. Whenever I give her money she will save up… Unlike me, I do keep track my expenses but I do not really write down the breakdowns… Men their lifestyle is different. Most men tend to drink and smoke and they spend a lot for that. They get influenced by their friends to spend unnecessarily. So, there goes the savings
>
> (P5; 98-100; 113-114).

To add on, Participant 6 stated that women were responsible to deal with financial management. She shared, "…Men are responsible to give women money and women deal with the rest of the management. Women can plan for the future of their families" (P6;81-83). Participant 9 shared the similar information. She said there were only some men who were keen on financial retirement planning and women were more alert because they were more family oriented. She shared:

> …There are some men who are more alert about their retirement planning but on whole the percentage of men who can plan for retirement is lower compared to women. Women are more alert when it comes to financial planning for retirement because they are more concerned about their family especially their children
>
> (P9; 73-77).

Participant 10 shared the same idea as well. He said, "Generally women are in a better position in financial planning as they would ensure that proper financial planning will give a proper psychological security. They manage their financial planning of the home to live a stable live upon retirement" (P10;94-96).

Generally, based from the opinions from participants, mostly mentioned that women were better in financial planning because they were more family oriented than men. At times, men can be also responsible more than women. Actually it all depends on the individual and their financial background. However, nowadays younger generation both men and women need a lot of exposure on financial planning because they do not give importance on saving up for their future.

Age. Age is an important factor in planning for retirement. Many specifically stated that saving for retirement should start from younger age. Participant 5 informed, "Age is important. Parents should teach their children to save since small age. At young age they should be exposed on ways to save up and spend necessarily" (P5;167-169). Participant 6 added, "…Age is very important. The importance of financial planning for retirement should be exposed to individuals in younger age itself so that they know how to spend and manage their money wisely" (P6;140-142). About the age another participant claimed:

> Age is definitely essential for planning. Individuals should start thinking about their retirement since young and they should start saving the moment they start working…when I started working I started investing in assets and set aside some amount of money for myself and for my children…
>
> (P1; 332-334).

Contradictory to them, participant 10 said that people cannot start planning for retirement immediately once they started working because of other commitments that needed immediate attention like settling PTPTN loan, car loan and also managing daily expenses. He said:

> By the age of 50, individuals should have started planning for their retirement. They should not start planning once they have found new jobs because at the initial stage everyone will be confused on how to plan their future because before they start working itself they will not have settled their debts like education loan… once the salary increases few years after working, then they can start planning
>
> (P10; 108-112).

Overall, it is always better to have the habit of saving from young age. It might seem very faraway to start saving up for future and planning for retirement, but once individuals stopped working their monthly income will reduce and that time they have to use the money that they have accumulated since young in order to maintain their standard of living.

Education level. Education level in a way is important for planning for retirement; however, many stated that even without higher level of education, individuals can plan for their retirement. Participant 7 shared, "Education level is not as important as an individual's attitude. There are educated people who do not know how to plan their finance well and they spend lavishly" (P7; 94-96). Regarding attitude, Participant 1 explained:

> …Education background of an individual does not reflect on his financial planning for retirement; attitude that matters the most. Like my father was not highly educated. In fact he was not a professional but he does small scale business; selling clothes from house to house. However, his financial planning was good…
>
> (P1; 93-95).

Participant 2 shared the same idea; however, he added on that he has seen highly educated individuals have gone bankrupt after they retire. He explained:

> Having the right attitude to save up for future is more important than having higher education level just to plan to save up. Planning comes from individuals. Every individual should know to plan for their retirement based on their work and affordability. Not everyone who is highly educated can save up and plan very well for their retirement
>
> (P2; 136-140).

Participant 3 added on that right kind of exposure and influence are more important than education level in financial planning. She said:

> Education level is not the most important factor which affects financial planning. In fact, exposure and influence are more important. When people are exposed to proper ways of saving up and planning for retirement, they can manage their salary and plan for their future well. Influence is also essential. If people are influenced by others who are good in planning for their future, definitely proper financial planning can be done
>
> (P3; 79-83).

Participant 9 said that parents play important role in educating their children on financial matters, pursuing to higher level of education in tertiary and above levels does not really affect financial planning for retirement. She explained, "Actually financial planning for retirement does not really depend on the education level of an individual. It depends on the upbringing of their parents. Since young parents need to advice their children on financial matters" (P9; 90-92).

Contradictory to them, participant 10 explained that higher level of education does not affect individuals with strong financial background but it affects individuals with lesser financial background. He explained:

> Higher education level does make a difference in financial planning for retirement. However, the higher level educated people with strong financial background do not really think that financial planning is important because they already have so many sources and so much at their disposal (have a lot of savings and assets) compared to those who certain level of education with lesser financial background. These individuals need to attain extra level of education because there is a critical need of exposure for them for planning their finance for retirement
>
> (P10; 101-106).

To add on, Participant 8 stated that in a way education level is important because when individuals are educated they have higher chance of getting exposed to better financial ways to plan for their retirement. She mentioned:

> "I feel that individuals who have higher level of education tend to have better financial planning. They learn better ways to save up and invest for their future. I feel that people with lower level of education will have an idea about planning for their retirement but they do not get much exposure from their group of friends. So, they just save up with their limited amount of knowledge and exposure"
>
> (P8; 70-74).

Overall, education background did not really affect an individual's financial planning for retirement. It all depends on the attitude and the mind set to plan for the future.

Impacts of financial attitude factors on financial retirement planning. Attitude refers to an individual's behaviour towards something. Financial attitude refers to an individual's behaviour towards managing his finance. Financial attitude factors like having direct and indirect dependency, being aware of financial status, being confident with retirement and knowing the duration of savings to last for retirement, figuring out how much saving is needed for retirement and keeping track with actual spending are vital in ensuring better retirement planning. The impacts of financial attitude factors on financial retirement planning are indicated in the following excerpts from participants.

Direct and indirect dependency. The attitude towards financial management is affected by factor like having to support direct dependency like spouse, children or grandchildren and indirect dependency like parents, parents-in-law or siblings. Participant 1 said:

> I have 5 children who were depending on me and my husband while they were schooling and in colleges. As a mother, I ensured that all my children get pocket money when they go to school and college. I also had more responsibilities to save up my money because I already set my goal to buy assets for all my children and set aside some allocations for all of them. I also had my niece to support. Even though she is not my own child, I set aside some allocations for her. So, most of salary is spent for my children and my niece.
>
> (P1; 98-101).

Participant 2 mentioned that his salary was just nice for his family; thus, whenever he got extra bonus or extra income, he will give to his parents. He explained:

> I allocated money for my children's education and also for my wife. If I managed to save extra money, I will give my parents some money. Actually, my salary was just nice to save up for my family. Thus, I will give my parents money only when I get bonus or extra income…
>
> (P2; 56-59).

Interestingly, Participant 3 mentioned that she thought it was her responsibility to support her little grandson financially and at the same time she taught him on how to save up for the future.

> "…Now I am retired and all my children are working and giving me money for my expenses and they also manage household expenses. However, I fulfil my responsibility as a grandmother. After retirement I save up for my only grandson. I want him to learn to save money since small so that it will become habit when he grows up later on.
>
> (P3; 141-144).

Participant 4 said that when individuals haad dependencies, they tend to become more responsible. He said:

> …I became more responsible in planning for finance after I got married and my responsibilities became more after my first daughter was born. I personally feel that, having someone who depend on you make you realise that it is important to plan your finance well
>
> (P4; 98-101).

According to Participant 5, it was his responsibility to support his wife and his mother even upon retirement and he did not find it difficult to do that because he was financially well prepared. He shared, “For now all my children are working and they are independent. I am supporting my wife and my mother financially even after my retirement. I do not find it difficult to support them because I am doing my own business…” (P5;117-119).

To add on, Participant 6 mentioned that she continued her business to support her youngest daughter and her cousins. She felt that it was her responsibility to support them. She said:

> I am supporting my youngest daughter who is studying at university and I am also supporting one of my cousins financially. I will save up the profit that I get from my business for me and for both of them.
>
> (P6; 33-35).

Participant 9 said even though her children depended on her husband for financial aid, she felt like it was her responsible to save up and to take care of her children. So she saved up money for them and invested in financial matters for them. She explained:

> “I do not fully support my children because my husband provides financial aids for their education and pocket money. However, as a working mother I allocate savings for all my 3 daughters every month. Thus, I spend my salary carefully as I have to save money for my retirement and for my children’s future and I also need to pay up for my insurance and my children’s insurance policies”
>
> (P9; 98-102).

Participant 10 mentioned the same idea on being a responsible dad who prepared ahead of time for his children the necessary financial aids. He shared:

> As a father I gave them the savings that I allocated for them while I was working and I also gave all the assets that I invested in when I was working. I have done my part as a father. When I was working, I really planned for my retirement and also for my children. So, I had to save up money for me and them
>
> (P10; 73-76).

In general, the opinions from participants showed that when they had direct and indirect dependency they tend to be more focused in planning for their retirement and automatically they developed the sense of responsibility to support their dependencies. Their financial attitude played an important role in helping them to plan their retirement.

Figuring out how much saving is needed for retirement, being aware of financial status, being confident with retirement and the duration of savings to last for retirement. The common financial attitude factors like finding out the exact amount needed for retirement, being aware of financial status, being confident with retirement and the knowing how long will savings last for retirement also reflect on how people plan for their retirement. The following excerpts show the effects on managing finance when participants take into consideration the above factors. Participant 1 shared:

> I did not specifically figure out how much is needed for my retirement but I was very alert with my financial status. I often check my bank balance; assets' balance payments and other financial matters because I do not like to have debts. So, I will update myself with my financial status every month. I'm very confident with my retirement because I know my savings are sufficient for me. I can be independent until my last breath. I am very confident because I started my retirement planning since the first month I started working
>
> (P1; 211-214).

Participant 2 emphasised on the importance of keeping track with financial status as it plays an important role in planning for retirement. He was very confident with his retirement as he had strong financial background. He explained:

> For me checking on my financial status is important even though I did not specifically figure out on how much saving is needed for my retirement in future. I believed that by checking on my financial status I can do better planning. I am very confident with my retirement now because I have asset, EPF, savings and also insurance which can last for a long time
>
> (P2; 180-184).

Participant 3 and Participant 4 said the same thing. They mentioned:

> I did not plan to save any specific amount of money for my retirement but I do aware of financial status. I will keep track with my savings and my extra income that I get every month. I am very confident with my retirement because I believe I have accumulated sufficient money for my retirement
>
> (P3; 119-122).

> I did not know the exact amount that I need to save for my retirement but I was aware of my financial status as I wanted to save up as much as I can for me, my wife and my daughter. I am confident with my retirement as I started my own printing business years ago and the business is good
>
> (P4; 127-130).

Participant 5 mentioned that despite of having sufficient of savings for retirement; he continued to generate extra income to save up more money for him to live a comfortable life. He said:

> I was not sure of the amount needed for retirement while I was working but I was aware of my financial status…I saved up a lot of money. I am confident with my retirement because for now I do not have many expenses but I am working to keep myself busy and to generate extra income. So, I am saving up more money to survive throughout my retirement years
>
> (P5; 122-126).

Participant 6 mentioned that she was not worried about her retirement years as she had accumulated sufficient savings and her children were working in government and medical expenses will not be as pricey as she goes to government hospital for her regular check-ups. She shared:

> I have not really figured out how much exactly I need to save for my retirement but I am aware of my financial status… I am confident that I can survive throughout my retirement years because I have savings and my children are working in government sectors. My medical expenses will not be costly because I always go to government hospital
>
> (P6; 100-101; 104-106).

Participant 7 also mentioned that she was confident as she had sufficient savings for her to survive throughout her retirement years and she only goes to government hospital for her medical examinations. She was also smart in dealing with her financial planning. She said:

> I am alert with my financial status. Even though nowadays I do not spend much and I do not have any debts to settle, I check on my bank account status and I also check on my rental money that I receive every month. I am confident with my retirement as I have savings for myself and my husband also has some savings for me. Medical expenses are not an issue as I go to government hospital for my check-ups
>
> (P7; 111-115).

Participant 8 was also aware of her financial status and she continued working to support herself and to manage household expenditure. However, she had accumulated some savings and she believed she can survive with that savings throughout her retirement years.

> I am aware of my financial status and I have to work extra to generate income to support myself and manage my household expenditure. Luckily, I do not have any debts to settle after I retired. I have some savings and I believe I can manage my retirement years using that savings
>
> (P8; 81-84).

Participant 9 emphasised on doing monthly budget to keep track with her actual spending and she was confident with her retirement because she started planning ahead of time and she had strong financial background. She shared:

> Yes, definitely I am aware of my financial status as it will help me in doing my monthly budget. I personally feel that doing monthly budget really helps me to keep track with my actual spending. I am very confident with my retirement as I planned for my retirement since the day I started working. So, I do not need to worry about anything. I am very sure my savings will last throughout my retirement years. I did not figure out on how much I need exactly for my retirement but I know my savings that I have now are sufficient
>
> (P9; 104-110).

Participant 10 stated the same thing. He said:

> I definitely do not how much exactly I need for my retirement but I am very confident with my retirement because the savings that I have accumulated so far and my monthly pension are good enough for me to survive throughout my retirement years
>
> (P10; 115-117).

Overall, all the participants did not really know the actual amount that was needed for their retirement but all of them were aware of their financial status. According to them, being aware of financial status was essential as it contributed towards planning for their retirement carefully. Their attitude on being confident with their retirement played a role too to plan for their retirement.

Keeping track with actual spending. It is also important to keep track with actual spending as it will contribute towards a proper financial planning for retirement. When individuals keep track with their actual spending, they can be more alert with their spending. Regarding the importance of keeping track with actual spending on financial planning for retirement, participant 1 shared:

> Definitely I keep track with my actual spending as I will need to make sure that I have savings for me and my 5 children at the end of the month. I also keep track of my actual spending so that I do not overspend
> (P1; 218-219).

Participant 2 mentioned that he had a notebook to write down his expenses so that he can easily keep track with his spending. He said, "When I was working, I had my own notebook to write down all my expenses that I spent for. I did that because I wanted to know how I spend my money and I can keep track with my actual spending" (P2;184-186). Participant 3 added on. She said:

> I do write down my expenses in a book and I do plan ahead for one year. Like for 2017, I have planned my finance breakdowns until December because I am going for vacations several times in this year. I keep track of my actual spending so that it does not go over the budget that I have planned
> (P3; 102-105).

However, Participant 4 admitted that he did not write down all his expenses but his wife did it. However, he ensured that he allocated savings for him and his family. He said:

> I do not really write down my expenses in a book but I do keep track with my expenses in my mind. At the end of the month I will make sure there are some savings for me and my family. However, my wife writes down the expenses in her book
>
> (P4; 135-137).

Participant 5 added on by saying his wife kept track of expenses and he gave her money every month for her to manage house household expenditure. He explained, "… My wife is good… According to her, she must write down whatever expenses she does because she can keep track with her spending. I am not like her" (P5;141-142). To add on, Participant 9 said, "I do keep track of my actual spending in ensuring my retirement planning goes well…I write the expenses down in a book. It would be easier for me to check on my expenses. I do not want to overspend" (P9;142-144). Moreover, Participant 6 and Participant 7 mentioned that they practiced to write down their expenses and they kept track of their expenses to avoid overspending. They shared:

> As a businesswoman, I train myself to write down whatever the expenses in a book for my future reference. I do keep track with my actual spending as I do not like to spend unnecessarily. I would rather save up the money for future usage
>
> (P6; 108-110).

> I have a book to write down my daily expenses. I feel it is important to keep track with my spending or not I might overspend. I also had housing loan to settle when I was working. So, I will write down every expenses and payments that I have done monthly
>
> (P7; 130-133).

Contradictory to them, Participant 8 said that, "I do not have any records of my expenses after I retired. I think it is not necessary because I do not spend much. I can remember how much I spent and the things that I spent for" (P8; 86-88). To add on, Participant 10 said:

I do write down in a book all my expenses just to keep track of my actual expenses. I used to write down in the book often when I had a lot of commitments, debts and school and college going children. But now, I just write down the basic expenses that I do because I do not heavy financial problems

(P10; 117-120).

Generally, most of them kept track of their actual spending by writing down in a book so that they can control their expenses and save up money for their retirement. The opinions from participants clearly indicated that writing in books made them more alert because they can see clearly their expenses rather than just recalling from their mind.

Impacts of financial literacy factors on financial retirement planning. Financial literacy includes the skills and knowledge that an individual has to make wise and impactful decisions with all of their incomes and assets. Everyone has some amount of financial literacy to manage their financial resources and the following excerpts from participants show the impacts of financial literacy factors on financial retirement planning.

Generate extra income. Financial literacy is important because when individuals have proper skills and knowledge on how to plan their finance, they can generate more income. Participant 1 shared:

"... Father taught us the skills to save up money and also to generate income from the resources that we have. As I mentioned earlier, by the age of 40 I had 5 houses for my children and that time they were studying. So, for now I rent out the houses and generate extra income…

(P1; 227-229).

Participant 3 mentioned that even though she did not have any assets, she had the literacy to save up while working and to generate extra income. She said:

> I do not have any assets but I had the knowledge to save up as much as I can while I was working… I am working as an insurance agent to generate extra income for my own expenses. I need to generate extra income
> (P3; 113-116).

Participant 4 and 7 admitted that they had the skill and knowledge to save up and invest. Even upon retirement they generate extra income from their investments that they had done ahead of time.

> I rent out 2 of my assets to get extra income especially after my retirement. Now, I am getting extra income from my own business and also from my assets. I am glad that I have the skill and knowledge to save up and invest in assets while I was working because now I am getting extra income from those assets
> (P4; 41-44).

> …Having the skill to invest in assets for getting extra income in future is great. I have another house and I rent it until now. So, now I am getting my pension and my rental money monthly. I learn how to manage the money that I get wisely. I invested in a house while I was working itself so that after retirement I can generate extra income
> (P7; 69-73).

Participant 6 stated that as a single mother even though she was not highly educated, glad that she had the skills and knowledge to generate extra income. She said:

> Even without higher level of education I believe I have the knowledge and skills to manage my money. I continue doing my business and also I also active in organising trips to local and foreign places to generate extra income. Although I am not highly educated, I have the skills and knowledge on how to manage and save up money for my daughter and for myself. I am a single mother and I would love to be independent
> (P6; 119-124).

Participant 9 said that investing in assets was a good financial skill that she learnt while working and now she generates extra income from her investments earlier every month.

> Investing in assets is one of the skills that I learnt while I was working and it is an important skill because I can plan for retirement. I invested in my assets several years ago when the price of assets was affordable. Now, I rent them out and get extra income from there every month

(P9; 61-64).

Participant 10 also shared the similar idea on financial literacy and he added on that as a government servant he was getting pension and he was working because he was healthy and at the same time to generate extra income.

> I invested in assets while I was working in government sector last time… I am getting good pension and I am working because I am healthy and my brain is active and I also can generate extra income. For now, I am getting 3 incomes; pension, salary and rental money from my shop lot. So, I manage my incomes well. I can generate income and save up for myself, for my wife and for my children…
>
> (P10; 77-81).

Generally, most of the participants stated that even after retirement somehow they generated extra income to at least cover up their daily expenses. Most of them rented out their assets to get extra income. Participant 6 stated that she was supporting her daughter even though she was 66 years old now. The excerpts from the participants indicated that most of them who had the skills and knowledge on finance can plan their retirement well.

Increase personal savings. Those individuals who have the skills and knowledge to plan their finance can surely generate extra income to add on their personal savings for other important expenses that might occur in the future. Regarding on how individuals with financial literacy can generate extra income to increase their personal savings, Participant 1 said:

> I not only re-invest my extra income in gold and lands but I saved some of the income in my personal bank. While I was working, I was aware that I will need money in future… I also keep track with my monthly expenses as I wanted to reduce my expenses as much as I can because I had to main aims while I was working; save for retirement and settle debts
>
> (P1; 131-132; 139-141).

Participant 2 mentioned that financial literacy was needed to plan retirement and to increase personal savings. He shared:

> Glad that I have settled my housing loans and the rental money that I get I can save up for myself despite of having EPF money. I plan for my retirement even after I have retired and I believe for that I need to have some financial literacy
>
> (P2; 159-162).

Participant 5 admitted that despite of getting good pension and extra income from his consultancy job, he continued to figure out ways to increase his personal savings.

> I am getting good pension every month and I also getting extra income from my consultancy job. I am financially secured but I continue to save up extra for myself and also for my wife
>
> (P5; 136-138).

Participant 7 and 9 said that they did monitor their monthly expenses and did monthly budget to ensure proper spending take place and also to increase their personal savings. They shared:

> I do monitor my monthly expenses. I will do a budget to minimize my monthly expenses. By doing budget I can cut down any unnecessary expenses. I will save up as much as I can monthly so that every month my personal saving increases. I think managing the money that you have is a skill that is required by every individual
>
> (P7; 117-120).

> Since I am working I get my salary and I also have EPF. I set a budget for my monthly expenses to check on my own expenses. If there are any expenses, which are not important, then I will cut down. I rather save more money for myself rather than spending unreasonably. I have planned my retirement well and now whatever extra income that I get I save up for myself
>
> (P9; 112-116).

Participant 8 admitted that she kept track of her monthly expenses to avoid overspending and save up money for her personal savings because it will be useful for her medical expenses in future. She shared:

> I do keep track with my monthly expenses although I do not spend much. The money that I have I will use to buy household things and at times I give my grandchildren pocket money. So, somehow I will try to save up money for my personal savings. In case if I need money for medical expenses in future; I can use my personal savings
>
> (P8; 88-92).

Contradictory to others, Participant 10 admitted that he does not really keep track with his monthly expenses as he is earning well and he has strong financial background.

> I do not really keep track with my monthly expenses because until today I am getting good incomes and I have sufficient savings for myself. I also do not have many expenses. I just need money for my daily expenses… I planned for my retirement ahead of time and now I am enjoying my retirement
>
> (P10; 127-129; 130-131).

Overall, according to most of the participants, they tried to minimise their monthly expenses so that they can save up more for themselves. Most of them were working and financially independent. Those who had the knowledge and skills to manage their money wisely planned ahead of time for their retirement. They said after retirement, the expenses will not be a lot. So, they saved up more money. In case in future they need money for any emergencies they do not need to depend on others. Thus, financial literacy played an important role for individuals to plan their retirement.

Impacts of financial education factors on financial retirement planning. Financial education is essential for financial well-being. Individuals who do not have financial education might find difficulties to plan for their retirement. Financial education is needed to make thoughtful and informed financial decisions. Individuals can learn how to make thoughtful and informed financial decisions by figuring out opinions and ideas on his own, talk to his family, co-workers, friends, consult financial planner or attend financial courses. The following excerpts from participants show the importance of financial education sources on financial retirement planning.

Individual, family, friends and counselling. When it comes to financial planning for retirement, certain individuals would to plan on their own and also using calculators or worksheets that are computer or Internet-based. They also tend to discuss with family and friends on how to plan for retirement. At times, there are individuals who would prefer to consult financial planners, advisors, accounts or even attend financial courses to gain financial knowledge.

Participant 1 mentioned that financial education was needed to make wise retirement decisions. She planned her retirement on her own and also asked ideas from her family and friends. Sharing ideas among others was a great idea. According to her it was a good idea to attend financial courses since young. She shared:

> It is very important to have financial education to make proper decisions for retirement. I did plan on my own for my retirement but I also asked opinions from my family and friends. Sharing information and opinions on saving up for retirement is important because we can have more knowledge. Like me, when I was working I had a friend who was a manager in a bank. She knew better on making investments. So, she taught me on how to invest in assets and share markets… My father also taught me on how to save up for my future… It would be a great idea to attend financial courses since young because individuals can get more exposure on how to plan for their retirement and these courses can give awareness to them
>
> (P1: 249-252: 255-257).

Participant 2 said that everyone should have financial education and opinions on financial retirement should be asked from the right person and he also mentioned that it is important to attend financial courses. He shared:

> I believe everyone should have financial education. It is good to ask opinions from the right person. I mixed with those who I see have stable finance background. So, I learnt from them on how to save up and invest for my future. Now, I think it is important to attend financial courses for exposure purpose
>
> (P2: 220-224).

Participant 3 recommended reading a lot of books of financial planning and the habit should start from the individual. She also asked her friend who has experience in financial field on retirement planning.

> I think everyone should read a lot of books on financial planning. The habit of reading book and gaining financial education should start from the individual himself. Besides that, I also got some ideas on finance from my friend who was a senior manager. I also took up several insurance policies because of my friend's influence. There should be financial courses on planning
>
> (P3: 150-154).

Participant 4 said emphasised that the urge to plan for retirement started from within. However, ideas from family and friends can be considered. Contradictory to others, he said that he would rather plan on his own by referring to financial planning books or seek ideas from family and friends than attending financial courses which are pricey. He informed:

> Hard work starts from individual himself to plan for retirement. Family and friends can also share their knowledge and experience on how they plan for their retirement. I personally feel that financial courses are not so important and we need to pay extra to attend these courses. I would rather buy books and read on my own or ask for opinions from my family and friends
>
> (P4: 154-157).

Participant 5 and 8 emphasised that it was good to ask opinions from family and friends who were well verse with finance. They also said that individuals need to attend financial courses while working for a better planning. They informed:

> It is good to share ideas among family and friends who have experience or good background in finance. They can share a lot of information which will be useful for us... Individuals should attend financial courses while working so that they can plan for their retirement ahead of time
>
> (P5: 144-145: 147-148).

> Gaining knowledge on financial planning from family and friends are important. They might share with us valuable ideas that we ourselves do not know…I feel that financial courses are important especially for lower income group of people. They need to get more exposure and financial education from those individuals with good financial backgrounds who conduct financial courses
>
> (P8: 104-105: 108-110).

Participant 6 emphasised on the importance of financial planning courses and consulting family members. She shared:

> Consulting family members is also important because at times they can also share their opinions…Financial planning courses are very good exposure for people. They can learn on how to plan for retirement earlier if they attend these courses at young age
>
> (P6: 126: 127: 130-132).

Participant 7 emphasised on discussing with close family and friends and for her financial courses were not necessary. She said, "I think we should share our financial constraints with close family and friends because they will share knowledge that they know. I think it is not necessary to attend financial courses because we have to pay extra" (P7;136-137;140).

Participant 9 said that close friends who were well versed in financial matters can share good ideas. Discussing with family was also important. She mentioned that financial planner also played important role in guiding for retirement planning and financial planning courses were vital. She informed:

> Close friends usually would not be reluctant to share their success in planning for retirement...I will also usually discuss with my husband when it comes to planning for retirement and also for children's education… Financial planner is also important because they are the experts in financial matters. I have personal financial planner for me at Public Bank. He will monitor my unit trust accounts and teach me on how to invest… Financial course in a way is important but I am not interested. I would rather discuss my financial plans with my family and friends
>
> (P9; 147-149; 151-153; 155-156).

Participant 10 emphasised that discussion between husband and wife regarding financial planning for retirement was very crucial and attending financial courses at the early stage of working was beneficial. He shared:

> Some individuals would prefer to plan for their retirement on their own. I think the most important is the discussion between husband and wife. Financial course is good to attend at early stage when people start working. So that, they can have better financial knowledge to plan for their retirement ahead of time"
>
> (P10; 138-141).

Overall, the excerpts from participants indicated that mostly would prefer to plan for their retirement on their own. However, they said that it would also be great to discuss financial matters with family and friends. Gaining financial education through financial courses was also important for them except for two participants. They said financial courses can be costly.

Exposing financial retirement planning conceptual model to Malaysians and the challenges. The product of this study is a conceptual model on financial retirement planning for Malaysians. Participants were asked on how to expose the outcome of this study to others. The following discussion comprises of two main subthemes: ways to expose financial retirement planning conceptual model to Malaysians and the challenges.

Ways to expose financial retirement planning conceptual model to Malaysians

School. Many participants suggested exposing the importance on saving since young in schools because according to them the habit of saving should start since small. Only then when they were young and when they start working, they can start planning for their retirement ahead of time.

Participant 1 said that simplified version of financial retirement planning should be included in Integrated Living Skills subject to expose to school students on financial planning and they will be aware of it and start saving since young and when they start working they can start planning for their retirement ahead of time. She said:

> I think the outcome of your study should be simplified according to the students' level and include in Integrated Living Skills subject. This would be a great way of channelling your ideas on financial planning… They will be more aware and they might develop the habit of saving money since young
>
> (P1; 274-277).

To add on, Participant 3 said, "I would suggest you to expose your findings on financial planning to schools in Malaysia. You cannot show your conceptual model to the students but you can simplify the model according to the students' level" (P3;194-196).

Participant 2 and 4 mentioned that school teachers needed to be exposed to advanced level of financial retirement planning so that they can comprehend and teach their students about it. They informed:

> … I feel that school students should be exposed on the importance of financial planning like saving pocket money in schools. So, when they become adult they will have the habit of saving money and when they start working they can start planning for their retirement. Higher level of information on financial retirement planning can be exposed to school teachers
>
> (P2; 227-231).

> Financial planning starts from school. Teachers should be exposed to the financial retirement planning conceptual model. Then they can simplify what they can understand according to their students' level of understanding. Teachers can organise workshops on saving awareness.
>
> (P4; 168-169).

Participant 6, Participant 7 and Participant 8 informed that schools should be responsible to expose simple and understandable knowledge on financial planning ways and encourage younger generation to start saving since young. They said:

> You can encourage schools to expose your simplified version of financial planning ways and the benefits to students. They should realise the importance of money and they should start saving from young itself
> (P6; 138-140).

> You should expose your ideas but of course in an understandable manner in schools. Students should learn how to save up money and spend wisely since young. I realised nowadays younger generation do not know how to save up and they spend lavishly. So, I think the habit of saving should start from school
> (P7; 143-146).

> Your outcome of study should be exposed in schools. There is where the habit of saving starts. Young children should have the awareness on saving so that when they start working they have the right attitude to start planning for their retirement
> (P8; 113-115).

Contradictory to others, Participant 10 emphasised on school teachers and he informed that, "You can organise talks for the schools teachers who are aged 45 to 60 years old. They are the ones who are in need of exposure on financial planning for retirement" (P10; 155-156).

Overall, most of the participants said that the habit of saving starts from young. School children should be exposed to the importance of saving up their money and ways to save up their money. This habit will be very useful when they start working. In fact, they can plan for their retirement from the first month of their work. It was impossible to expose to schools students the bigger picture on planning for retirement as they will not understand but the bigger picture can be exposed to school teachers.

Media. Media like television, radio, newspaper and also internet are very common ways of exposing important matter to the public. The importance of financial literacy planning and the impacts of a number of factors on financial retirement planning can be exposed through media. Participant 3 mentioned that the idea on financial retirement planning can be exposed through newspapers. She shared, “You can also expose your conceptual framework in media like in newspapers. Many Malaysians read newspapers despite of having advanced technology. So they will gain some information from your publication on financial retirement planning” (P3;232-234).

Participant 5 mentioned the same idea, “You can publish articles on financial planning for retirement in newspapers. Surely people will read your articles because for now everyone is seeking proper ways to plan their finance and your study is a good one” (P5;170-172). Participant 9 said the same thing as well, “You can publish your thesis outcome in newspaper. Many people may focus on your model” (P9; 166-167).

Participant 4 mentioned that the researcher should expose the idea on financial retirement planning through television and radio programmes. He said, “Maybe you should be interviewed in television programmes which will broadcast financial issues. You can also talk about your findings in radio channels. People will definitely pay attention because nowadays they need financial knowledge to survive” (P4; 171-173). Participant 8 added further, “Then, I think media is the best way to expose the outcome of your study. I believe most Malaysians prefer to get information from media like television, radio, newspaper and internet” (P8; 116-119).

Overall, half of the participants said that, exposing the outcome of this study through media was one of the best ways because Malaysians do spend most of their time in media like television, radio, newspaper and internet. By channelling the outcome of this study through media, Malaysians can gain some knowledge on financial retirement planning.

Policy. Policy is actually a principle of action proposed by a government. Implementing policy is a process of translating an idea from a concept to reality. Government will expose a policy to the public if it is relevant. Regarding the importance of implementing the concept of financial retirement planning in ageing policy, Participant 1 shared on top of policy implementation government should also give right awareness to public. She informed, "It is not about policy, but it is about awareness…Government can include the conceptual model in the policy; however, proper awareness should be given to the public so that they have the determination to plan for their retirement" (P1; 269; 271-272).

Participant 3 emphasised on implementing the outcome of this study in policy. She said, "You can suggest to the government body to implement your conceptual model. If they find it useful for them, then they might include it in the policy" (P3; 187-188). Participant 9 suggested the same idea as well. She said, "You can expose to public on financial retirement planning through policy. Government should take charge for it" (P9; 163-164). To add on, Participant 5 also strongly recommended implementing the conceptual model of financial retirement planning in ageing policy. He shared:

> This is a good and important study. Nowadays many people are finding difficulties to save up money for their future and they are facing challenges to plan for their retirement. If you can find a way to include your conceptual model in policy, it will be a great thing
>
> (P5; 157-159).

Participant 10 suggested the same idea and he added further saying that the conceptual model on financial retirement planning should be presented at the Ministry of Women, family and Community Development. He said, "You can suggest to policy makers to implement your conceptual model in ageing policy. You must present your product at the Ministry of Women, family and Community

Development" (P10;152-153). Generally, more than half of the participants said that, it was also good to promote the conceptual model in ageing policy because the ideas can be delivered to Malaysians and they can be more alert and start planning for their retirement ahead of time.

Workshops/Seminars/Conference. The researcher can convey the outcome of this study through workshops, seminars and conference because it will be beneficial for those who attend. He shared:

> You can channel your conceptual model through financial planning seminars and workshops. This would be great because those who attend these seminars and workshops usually keen to learn on financial planning. So, your findings will be very useful for them. You can also present your findings in national conferences on financial planning for retirement. Those who attend the conferences will surely have interest in your topic.
> (P10; 144-148).

Generally, workshops, seminars and conference were proper ways to channel the outcome of this study as well because only those who were interested in financial retirement planning will attend particular workshops, seminars and conference.

Publication. Publishing journals and books on the outcome of this study can be a good idea because interested group of people will surely read the journals and books. Participant 10 said, "You can also publish your findings in local journals and high impact journals and you can even publish in books on financial planning" (P10;148-150). Basically, publication was another way of promoting the conceptual model to the public.

Challenges. There are many ways to promote the conceptual model on financial retirement planning to the public; however, there are challenges that might come along. Regarding the challenges that occur in the process of exposing the product of this study to Malaysians, Participant 3, Participant 5 and Participant 9 mentioned about rejection of idea by public and policy makers and they being unconcern for financial retirement planning. Participant 5 said, “Well, one of the challenges is that the policy makers may reject your idea and the second challenge is not everyone is keen to accept your ideas on financial retirement planning” (P5;162-163). Participant 9 shared, “Some people might criticise your findings” (P9;170). Participant 3 further added on political influence:

> Some people might not accept your ideas on financial planning for retirement but of course we cannot please everyone. So, you do your part. Up to them whether to accept your ideas or not. When it comes to policy implementation, there might be some political influence in the government. They might not accept your ideas. So you need to be prepared for any situations
>
> (P3; 200-203).

Participant 10 said that the challenge would be on how the researcher wants to promote the findings. Participant 10 shared:

> There will be a lot of challenges on how to promote your ideas. How you want to promote the results of your study and what the policy recommendations are. You must be able to talk it out. You may find it challenging to expose your findings to schools because nowadays school teachers are very busy preparing for their classes and they also have administrative work to do. I don’t think they will have time to accept and present your ideas to the students
>
> (P10; 158-162).

The challenges will be definitely there when it comes to promoting new ideas to public. People might criticise and may not accept the ideas. However, it depends on how to talk it out and promote the idea.

Other determinants that affect financial retirement planning. There are other contributing factors that affect financial retirement planning. Final question was asked to the respondents on other determinants that they think can affect the financial retirement planning. The following discussion comprises of four main subthemes: goal setting, family background, awareness and lifestyle.

Goal setting. Goal setting for retirement planning is essential because by setting target to achieve for retirement, one can focus on what need to be done. Individuals can also develop a plan to keep track with the progress. Regarding the importance of setting goals to plan for retirement, Participant 7 said, "Goal setting is important because people can be aware of their financial situation and they can plan accordingly for their retirement" (P7;149-150). Participant 1 claimed that she sets goals for her retirement planning and achieve the goals for a better retirement.

She shared:

> I set my own goals to plan for my retirement. Goal setting is important for me because I do not spend unnecessarily as I need to achieve my financial goals... It is important for me to set my goals to plan for my retirement. I believe without proper goals, we will not know where we are heading to
> (P1; 298-301).

Participant 2 said that achieving monetary goals initially will be a challenging task; but individuals will get used to it as time passes. He informed:

> Goal setting is important for planning. Definitely in the beginning, it will be difficult to follow the plans accordingly to achieve the goals, but as time passes people will get used to it. For me, goals should not be over the limit, goals should be within your means
> (P2; 268-271).

Participant 3 informed that people should set goal to save up at least 30 per cent of their income for future. She further added that people should set goals to avoid overspending and to achieve the goals for better living. She said:

> Goal setting is very important in planning for retirement. Everyone should have the goal to save up at least 30 per cent of their income. I also set my personal goal to go for vacations. When I have goal setting, I do not overspend. I keep track with my financial plans to achieve my goals
> (P3; 207-209).

Participant 4 said that setting monetary goals was vital to avoid overspending and to practice a disciplined lifestyle. He said, "I set my own financial goals for my retirement while I was working. I know if I do not have goals, I might just spend unnecessarily. I believe by having financial gaols, people can be more disciplined" (P4;177-178). Furthermore, Participant 9 mentioned the same opinion, "People should have clear goals in planning their finance for retirement. When the goals are clear, we tend to discipline ourselves to achieve the goals" (P9; 173-174).Participant 5 mentioned the same ideas on goal-setting as others. He said:

> Goal setting is an important factor in planning for retirement because at the end of the day you will know what to do in order to achieve your goals. Planning without proper goals will be a failure. Once goal setting is done, you will automatically reduce your expenses to achieve your target. Besides that, when you have clear goals, you will have the determination to achieve the goals and automatically financial discipline comes along with you
>
> (P5; 176-181).

Participant 6 informed that goals should be set and there should be element of hard work in every individual to achieve those goals. Participant 6 shared:

> Goal setting is a must to have thing. It affects financial retirement planning. Those without proper goals will find difficulties to plan for their retirement. Remember money is need for every single thing nowadays. Every individual should have this in mind and set their financial goals properly and work hard to achieve those goals
>
> (P6; 144-147).

Participant 8 said that the needs to set goals depend on individuals. She needs monthly goals to plan her expenses; but she said certain people can plan their finance without any specific goals.

> Goal setting is important for me because I need to have clear goals to plan my monthly expenses. However, I think certain people manage their finance differently. They do not need goal setting to plan for their retirement. They are aware of their financial status and they plan accordingly without setting any goals. So, I feel it is actually the preference of each individual whether to have goal setting or not
>
> (P8; 122-126).

Participant 10 informed that goals should be broad and achievable and always remember not to compare goals with other. He said:

> Goal setting is important but for me I think the goals should be broad and achievable. Only then people can achieve the goals without any frustration. Always remember we should never compare our goals with others because different people have different goals and different ways of planning for their retirement
>
> (P10; 165-168).

Generally, all the participants stated that setting monetary goals to plan for retirement was one of the crucial determinants which impacted financial literacy planning. When individuals set monetary goals, they tend to be more alert with their financial status and they take the initiative and work hard to achieve their monetary goals.

Awareness. Awareness is another important determinant in financial retirement planning. Awareness is all about being concern about the surrounding financial situation. In planning for retirement, individuals ought to be aware of their financial status and from there they start planning for their retirement.

Lifestyle. Lifestyle is the way an individual or a group of people live in this world. Lifestyle is an important factor that every individual should be aware of because the way people live their life will determine whether they can save up for their retirement or they spend lavishly without thinking about their retirement. Regarding the effect of awareness on financial retirement planning, participant 1 mentioned that people should be aware of their financial status all the time. She shared:

> …It is all about awareness. You should be alert with your financial status… Lifestyle of an individual affects the way an individual plans for his retirement. If you are a person who loves to live a high-class life with a lot of unnecessary expenses, then your financial planning for retirement will be a failure
>
> (P1; 341-343).

Participant 2 emphasised on the importance of being aware on the risks of not planning for retirement and people should be also aware of their financial status to plan their retirement accordingly. He said:

> "Nowadays younger generation tend to live a high class lifestyle. They are not aware of the lifestyle that they are living in. They simply spend without any planning. The most famous and dangerous thing being practiced by younger generation nowadays is having credit card...Everyone should be aware of the risks that they might come across if they do not plan well for their retirement. People who are aware of their financial status can plan accordingly. People can invest in assets and generate extra income but they should be wise in investing.
>
> (P2; 115-118; 284-287).

Participant 7 and Participant 10 informed that people needed to be aware of their financial status and they needed to be more responsible to take proper steps in saving up for their retirement. They shared:

> People need to be aware and take more initiative in saving up their money for their future especially for retirement because once they retire their income will be lesser and when they are getting old they might need extra money for their medical expenses
>
> (P7; 156-159).

> Everyone should be aware of the financial status and they should know how to plan their retirement well and people should also have the courage to take risk in the process of financial planning
>
> (P10; 171-173).

Overall, the opinions from participants clearly indicated that being aware of financial status can contribute towards a quality retirement planning. Individuals who took risks in planning for their retirement were surely aware of the surrounding financial situation. Individuals should be aware of their lifestyle as well as it was an important determinant of financial retirement planning. When people tend to practice an extravagant lifestyle they tend to fail to plan their retirement because they did not have the habit of saving up and planning for their retirement wisely. On the other hand, when people practiced a simple lifestyle, they tend to live a comfortable life upon retirement.

Exposure. The exposure on financial planning is an important determinant in planning for retirement. The planning for retirement depends on what kind of exposure the person has experienced. Right exposure will lead to proper financial retirement planning and wrong exposure will lead to poor financial retirement planning. Regarding the impact of exposure on financial retirement planning, Participant 1 mentioned that exposure from family and friends were very crucial in financial planning. She informed:

> "Family background is so important in supporting individuals to plan for retirement…My father, he was my role model. All my other siblings are good because they having sufficient savings and also have assets even with moderate salaries all because of my father's influence…Another important factor is exposure among friends…If you surround yourself with people who are smart in financial planning and so on without any kinds of corruption involved, you will be able to succeed
>
> (P1; 308; 317-318;326-327).

Participant 2 said that choosing the right friends was very important because right exposures come from the right friends. Parents also play vital role in educating their children since small regarding financial planning. When parents expose to their children about it since young, they tend to develop a right mind set on planning for retirement. He said:

> Before I got married I mixed around with a group of friends who like to spend most of their time outside. Once I got married, I started making friends with those who I see are very good in planning their finance. So, I learnt a lot of things from them. Since then, I started planning for my retirement and I also saved up money for my family. Parents' role in educating children on financial planning is important. Since small parents should teach their children to save up their money… Parents can tell them to start saving for their retirement by saving up money and investing in assets according to their affordability
>
> (P2; 140-145; 231-234).

Participant 3 emphasised on parents' exposure that affected financial retirement planning. She said that parents must have the responsibility to expose to their children on how to save up, invest and generate extra income since young. She further added:

> …I believe everything starts from home. Children's attitude on financial planning depends on the upbringing of their parents. I am a single mother and I do explain to my children on the importance of saving for future and I asked them to start planning for their retirement ahead of time because all of them have started working. I also teach my grandson to save even though he is just 2 years old"
>
> (P3; 92-96).

Generally, it was true that the exposure from the group of friends that an individual choose to mix around with will affect the financial retirement planning. The wrong group of friends will discourage a person to save up and the right group of friends will encourage a person to plan their retirement well. Exposure from family was another important determinant that will affect financial retirement planning. Parents who educated their children since young to save up and plan for their retirement will give a great impact on financial retirement planning.

Socioeconomic Status (SES). SES is defined based on an individual's income, education and occupation. Individuals from different SES background plan their retirement differently. Regarding the impact of SES background on financial retirement planning, Participant 1, Participant 2 and Participant 4 mentioned that low or high SES did not make any difference in planning for retirement because everyone had different ways of managing their money. They explained:

> Actually there is no difference between low and high SES. It all depends on the individuals. Generally, those who earn less of course will have trouble in saving up money especially if they have many children. But those who earn well also have difficulties because they will have more expenses like paying up for their luxury cars, big house and managing high-end lifestyle. Therefore, it all depends on how people handle their money
>
> (P1; 327-330).

> People who have higher and lower positions have their own way of planning. Every level of people got their own expenses and has different lifestyles. If you see, people who earn a lot have a lot of debts because of their luxury lifestyle. Every month, they use up most of their salaries to pay up their debts. Therefore, I feel that everyone should know their levels of affordability and plan for their retirement wisely
>
> (P2; 276-280).

> People from different SES have their own way of managing their money. It all depends on the individual on how they plan for their retirement. At times, even people from low SES background, can afford to send their children to study medicine because they work hard to get income to support their children…For those who are from high SES background with strong financial background, money should not be an issue. They will somehow know how to manage their money
>
> (P4; 181-185).

Contradictory to others, Participant 8 stated that low and high SES background was important in planning for retirement. She further added:

> “I feel that low and high Socioeconomic Status background play important role in planning for retirement. Individuals from high Socioeconomic Status with strong financial background tend to plan their retirement very well. In contrast, individuals from low Socioeconomic Status with poor financial background will find difficulties to plan for their retirement. These individuals will have the urge to save up for their retirement but somehow they fail because their salary is very little
>
> (P8; 130-135).

Participant 10 emphasised on three groups of people; prepared group, semi-prepared group and unprepared group with different SES background rather than mentioning about people with low and high SES background. He informed:

> "… I came across people from different level of SES background. Generally, financial planning comes in for those who are prepared. Like me I have prepared myself for retirement. There are 3 groups of people when it comes to financial planning; prepared group, semi-prepared group and unprepared group. The first group is the prepared group are comfortable upon retirement because they have their savings, assets, pension and EPF and they do not have any debts… The second group is the semi-prepared group depend on their pension and EPF but they do have some savings…The third group is the unprepared group. This group of people fully depend on the pension and EPF. Despite of having financial constraints, they do not have the interest to continue working to generate extra income upon retirement. They try to live by their faith
> (P10; 15-20; 23-24;37-40).

Overall, the opinions from participants indicated that individuals with different SES background planned their retirement differently. It was not necessary that individuals from low SES background find difficulty to plan for their retirement and it was also not necessary that individuals from high SES background can survive their retirement. It all depends on the individuals' determination to plan for their retirement. Generally there were three groups of people; the prepared group, the semi-prepared group and also the unprepared group. These groups of people were differentiated based on their capability to plan their retirement ahead of time.

To sum up, semi-structured interviews were used to answer research question 4; what are the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia?

Researcher developed new themes based on inductive thematic analysis. There were five main themes emerged from the data as a result of such analysis; financial planning before retirement, mastering financial literacy, determinants associated with financial retirement planning, ways to expose financial retirement planning conceptual model to Malaysians and challenges. In addition, the impacts of demographic factors, financial attitude factors, financial literacy factors and financial education factors on financial retirement planning were also identified.

Summary

Overall, chapter 4 provides the overview of the findings of the two major parts in this study; part one is survey and part two is interview. Mixed method research design was used in this study; quantitative analysis was used in the first part and qualitative analysis was used in the second part of this study. Specifically the quantitative analysis included descriptive, binary logistic regression, cross-tabulation and multinomial analyses. Qualitative analysis is done using semi-structured interview.

CHAPTER 5

RESULTS AND DICUSSION

Overview

This is the final chapter of this study. This chapter includes the results and discussion of all the findings in this study. It also includes the discussion on the future implications and contributions. This chapter consists of six sections. The first section includes the overall summary of the study which summarises the methods of research used in the first and second part of this study.

The second part includes the discussion of all the findings presented in the previous chapters by comparing with relevant evidences from literature reviews on financial retirement planning. The third section includes the conclusion of this study. The fourth section includes the implications of this study on elderly individuals in Malaysia and the fifth section includes the researcher's recommendations for the future research and the final section includes the summary of this chapter.

Summary of the Study

Retirement period is an importance phase of life. This is the phase where people stop working and rest at home after so many years of hard work. A comfortable retirement comes along with extensive planning. Financial aid is essential in retirement. Thus, financial retirement planning is one of the crucial matters in retirement. Financial planning for retirement cannot be done overnight; in fact, it requires years of hard work and determination. It requires a long-term commitment, sufficient savings and investment plans. Without proper financial planning, retirees can survive a moderate lifestyle but not to go beyond. For instance, they cannot go for holidays or spend extra for their family. In fact, they need to be careful when they spend because they only depend on either pension or EPF for their daily expenses after retirement.

Those who failed to plan their finance for retirement might feel the pinch when they come across any unexpected situation like paying for expensive medical expenses. This situation is prone to happen when people get older. Thus, to overcome any unforeseen circumstances, a proper financial planning for retirement is essential for every individual. The current economic condition in Malaysia is daunting and many people are facing financial constraints. It is common that, many Malaysians who are retiring do not give priority to their personal financial planning for retirement maybe due to lack of exposure on financial planning.

The main purpose this study was carried out as an initiative to identify the key determinants affecting financial retirement planning of the urban elderly in Malaysia. It was also intended to identify the relationship between demographic factors and financial planning factors and also to specifically identify determinants that influence financial retirement planning in Malaysia. The product of this study is the conceptual model on financial retirement planning. This study was conducted using mixed method research design which included two approaches; surveys and interviews.

The first part of this this study was done in a quantitative manner. There were two survey cohorts in the first part. The objective of the first cohort survey was to identify the key determinants of financial literacy education of elderly individuals in Malaysia. The objectives of the second cohort survey were to identify significant relationship between demographic factors and financial planning factors and to identify the significant determinants that influence financial retirement planning of elderly individuals in Malaysia.

In the first cohort, survey was carried out with 1239 samples with different kind of characteristics such as gender, race, religion, education level and so on from Klang Valley. These samples fulfilled the specific criteria determined by the researcher. The data was analysed using descriptive statistics and binary logistic regression. The findings from the first cohort of survey indicated the key determinants of financial literacy education of elderly individuals in Malaysia. This data can be useful for those who are interested to know the essential determinants which affect the financial planning for retirement.

Even in the second cohort, survey was carried out; however the samples were lesser. It was conducted among 623 samples with different kind of characteristics such as gender, race, religion, education level and so on from Klang Valley. These samples fulfilled the specific criteria determined by the researcher. The data was analysed using descriptive statistics, cross-tabulation and multinomial logistic regression.

The findings from the second cohort of survey indicated the significant relationship between four demographic factors; age, gender, ethnicity and education level and financial planning factors. The significant determinants that influence financial retirement planning of elderly individuals in Malaysia were also identified. This data can be useful for those who are keen to know the relationship between demographic factors and financial planning for retirement and the essential determinants which affect the financial planning for retirement.

The second part of this study was done in a qualitative manner. Qualitative approach was used to validate the quantitative findings. Semi-structured interviews were carried out with ten chosen samples. The samples were chosen using purposeful sampling and they fulfilled the specific criteria determined by the researcher and all the samples were from Klang Valley. The data was analysed thematically following the transcription process. The findings from interviews resulted in rich information from samples based on their real life experiences on the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia. This data can be helpful for people who need to plan their finance for retirement effectively. The overall product of this study was a conceptual model on financial retirement planning of elderly individuals in Malaysia.

Discussion of Findings

Survey (1st Cohort). The discussion in this first cohort of survey in the first part of this study will be based on the research objective stated in the first chapter in the study. As stated earlier the findings in the first cohort of survey were on the important financial literacy education determinants that affected the financial planning for retirement among urban elderly individuals in Malaysia.

Profile of respondents. Results of descriptive statistics done on the variables related to demographic levels factors, financial attitude level factors and financial education level factors in the first cohort of survey in the part of this study reported that most of the respondents who participated in this study mostly with secondary education level (48.3%), followed by tertiary education level (27.9%) and primary or less education level (23.8%) and most them owned a house (97.7%). The finding indicated that higher education level was not a necessity for financial planning.

Individuals with least education level like secondary education level can afford to invest in house for their future and this result was contrasted to a local study done by Nurul Shahnaz Mahdzan and Saleh Tabiani (2013) where the researchers found that education level influenced the probability of saving positively and also to another study done in the United States of America by So-Hyun and Grable (2005) where they found that individuals who had higher educational levels like college graduate and higher will have retirement saving plans.

The finding also reported that 74.35 per cent of respondents were married and 31.8 per cent of them had dependencies that they needed to support financially even after they had retired. Even with this commitment, 91.4 per cent of respondents who participated in this study did not have outstanding housing loan and almost half them owned vehicle assets and 37.2 per cent of respondents owned property assets. This indicated that those who were married can have better financial planning and this finding confirmed what Knoll, Melissa, Tamborini and Whitman (2012) reported. They reported that married couples who had long-term commitment implied by marriage encourage them to foresee their old age and retirement needs ahead of time. A survey done in America also indicated the similar finding. The survey finding proved that 80 per cent of married adults were adequately prepared for their retirement compared to 55 per cent of unmarried adults (Society of Actuaries, Urban Institute & Women's Institute for a Secure Retirement, WISER, 2012).

Descriptive analysis also reported that a small number of respondents who participated in this study had non-productive income (31.2%) like remittance from children, annuity, own pension or spouse's pension and more than half of them had productive income (68.8%) like income from own work, income from working spouse, interest/dividend from savings and investments or rental from properties. This report showed that retirees continued to work upon retirement or getting income from their earlier investments upon retirement and it was consistent with a study done by Copeland (2014) who found that many employees had intention to continue working upon retirement to save up more retirement.

In Malaysia, it was a common scenario for retirees to depend on their pension fully. Even the descriptive report in this study showed that 100 per cent of retirees depended on their pension and EPF. This result reinforced the findings of social and economic thinktank Blindspot which found that there was 14 million of workforce in Malaysia. 6.5 million out of 14 million workers were EPF members and 70 per cent of them were lacking in savings for retirement. The remainder, almost six million workers received life pension after retirement and they did not have savings for retirement at all and all these workers from both private and government sectors depended on their EPF and pension upon retirement (Kaur, 2016).

Research Question 1: What are the determinants of financial literacy of elderly individuals in Malaysia?

The research findings indicated that the level of education, owning luxury amenities and minimum monthly expenses were vital determinants of managing monthly expenditure for elderly. The finding showed that elderly individuals who had secondary and less level of education, they were more likely to manage monthly expenditure. In another word, elderly individuals with least level of education had the knowledge to manage their monthly expenditure.

This finding was not consistent with Lusardi and Mitchell (2011) finding. They found that higher level of educational attainment was needed for a more positive and greater financial literacy. Further evidence depicted that people who had completed university or college degree were more financially knowledgeable (Almenberg & Save-Soderbergh, 2011).

People owned luxury wealth like air-conditioner or microwave in their houses when they knew how to manage their monthly expenditure well. In this study, the report for luxury wealth indicated that elderly individuals who had accumulated wealth were most likely to manage their monthly expenditure wisely. This result was similar to a study conducted by Behrman, Mitchell, Soo and Bravo (2010). They reported on the relationship between financial literacy and wealth accumulation and reported that financial literacy was positively and significantly correlated with wealth. Furthermore, the result was also in good agreement with a recent report by the Ministry of Finance Ontario (2014) and from more recent evidence from a study done by Nathan (2015). These two recent reports depicted that people who give less priority in planning for their retirement will not succeed in accumulating adequate wealth for their retirement period in most of the countries including Malaysia.

The finding for minimum monthly expenses depicted that elderly individuals who had monthly expenses of RM1001 and above they were more likely to manage monthly expenditure. This clearly indicated that people who had more expenses tend to manage their monthly expenditure as they did not want to overspend. This was crucial as they had the knowledge on how much they need for their retirement. This finding reinforced the result by Sightings (2014) which found that to figure out how much an individual needs for retirement, figuring out monthly expenses was a prerequisite and also the result by Wells (2015) who stated that expenses should be controlled according to individuals' incomes and the goal should be not to spend more than individuals earn and these lead to a successful financial planning.

Survey (2nd Cohort). The discussion in this second cohort of survey in the first part of this study was based on the research questions stated in the first chapter in the study. The first cohort of survey was on financial literacy education as it contributed towards financial planning and the second cohort was on financial planning factors. As stated earlier the findings in this first cohort of survey were on the significant relationship between demographic factors and financial planning factors and the significant determinants that influenced financial retirement planning of elderly individuals in Malaysia.

Profile of respondents. Results of descriptive statistics done on the variables related to demographic factors, financial literacy factors, financial attitude factors and financial education level factors in the second cohort of survey in the part of this study reported that most of the elderly individuals were married (74.6 %) and mostly had five and below number of children (89.9%). The elderly individuals who participated in this study were mostly with secondary and above levels of education (78.2%). Half of them owned assets (60.5%) and all of them had source of income (100%). More than half of them (64.5 %) had minimum monthly expenses of RM1000 and above.

These frequency findings indicated that married couples with lesser number of children and with certain level of education can plan their finance for retirement as more than half of them can afford to own assets and all of them had sources of income upon retirement despite of having minimum monthly expenses above RM1000. They had very few dependencies (22.9%). Overall, these findings indicated that those who were married can have better financial planning and again these findings reinforced what Knoll, Melissa, Tamborini and Whitman (2012) reported.

In terms of financial attitude, more than half of the elderly individuals (67.4%) stated that their financial status was the same compared to five years ago and 32.6 per cent of them admitted that their financial status was worse compared to five years ago. Elderly individuals did not do anything to improve their financial status; thus, the status was same for the past five years. This finding was consistent with Mahalingam and Wong (2013) where they said that even though Malaysians were earning more compared to last time, their ability to save up money had not improved and many were not ready for retirement.

Elderly individuals who were not confident retiring comfortably because of not enough money were 29.7 per cent compared to respondents who were very confident retiring comfortably because of sufficient money were 10.4 per cent. However, more than half of the elderly individuals (59.9%) said that they can retire comfortably as they depended on their family and pension upon retirement.

The report depicted that many elderly individuals said that they can retire comfortably even without having proper planning for their retirement because they fully depend on their family and pension or EPF. This result was contrasting to a study done by Ganang et al. (1998) where they found that sandwich generation members were responsible to support their parents financially; however, they priority was their own children and their children's education. The conflict began here as studies carried out by Concepcion and Perez (2006) and Grundy and Henretta (2006) proved that children with more offspring were less likely to provide their own parents with financial support.

The finding in a study done locally by Jariah Masud and Sharifah Azizah Haron (2013) indicated that older parents used to depend on their children finically; but, due to increased living costs, migration and change in structure slowly the social support system eroded.

Additional evidence on this conflict of parents depending on children was reported by Tengku Mazlinda (2015) in Federation of Investment Managers Malaysia (FIMM) Today. It was reported that, in Malaysia with the current challenging global economic, depending financially on children who themselves maybe be stressed in supporting their own families financially in the future may be a tad too promising.

Previously, the finding from the first cohort of survey also indicated that retirees depend on their pension and EPF upon retirement. Even in this second cohort of survey a higher frequency of elderly individuals was found did not plan for their retirement because they were comfortable with the pension and EPF that they get. This finding concurs well with Kaur (2016). She found that almost six million workers received life pension after retirement and they did not have savings for retirement at all.

In terms of duration of savings to last, elderly individuals who did not expect their savings to last had the highest frequency (66.6%). More than half of the elderly individuals did not ever tried to figure out how much they need to save for retirement (76.4%). 44.5 per cent of elderly individuals never kept track of their actual spending. These findings showed that elderly individuals without financial a proper financial attitude cannot plan their finance for retirement and they did not have sufficient savings to sustain them throughout retirement. These findings were in good agreement with a study by Atkinson and Messy (2012) where they found half of Malaysians tend to have negative attitude towards saving money as they did not have the attitude to save up money for future.

In terms of financial education, 76.2 per cent of the elderly individuals did not seek any ways to plan their finance for retirement. Elderly individuals who planned on their own were 17.8 per cent compared to those who seek for help from their family, friends and by attending financial courses or seminars and consulting financial planners, advisors or accountants (5.9%). Overall findings on financial education indicated that elderly individuals did not have financial education and this lead to poor financial planning skills. The findings were in complete agreement with Bank Negara Assistant Governor Abu Hassan Alshari Yahaya (as cited by Loh, 2013). He stated that financial education was needed from young to adulthood as individuals need it to practice high level of discipline and to enhance their financial management skills.

Research Question 2: Are there any significant relationship between demographic factors and financial planning factors?

The analyses were done between seven financial planning variables (asset ownership, comfortable retirement, duration saving to last, estimation retirement saving, financial planning ways, five year financial situation and monitor spending) by age, gender, ethnicity and education level.

The statistical analyses in this study reported that age was significant for comfortable retirement and monitoring spending variables. There was a significant and positive relationship between comfortable retirement and age. The finding showed when the age increased, the financial attitude for comfortable retirement increased. There was also a significant and positive relationship between monitoring spending and age. The finding showed when the age increased, the financial attitude for monitoring spending increased.

These findings wre consistent with a study done by Taqadus Bashir, Asba Arshad, Aleena Nazir and Naghmana Afzal (2013). They found that as an individual grows older, he or she tend to have more knowledge on financial matters and this aided in retirement planning. On the other hand, Lusardi and Mitchell (2011) and Arrondel et al. (2013) found that middle aged individuals who were aged between 40 and 60 found to be more financially literate. The finding was also contrasting with what Beckmann (2013) found; elderly individuals were less financially literate. Bhushan and Medury (2013) also found an opposing outcome; literacy was not affected by age.

Furthermore, the statistical analyses in this study reported that gender was significant for asset ownership, comfortable retirement, duration savings to last, estimation retirement savings and financial planning ways. There was a significant and positive relationship between asset ownership and gender. The finding showed higher number of male elderly individuals owned at least one type of asset either or both property and vehicle while the other. There was also a significant and positive relationship between comfortable retirement and gender. The report depicted that there was a significant and positive relationship between comfortable retirement and gender. Higher numbers of female elderly individuals never thought about money after retirement because they had support from their family and they depend on pension or welfare was higher compared to male elderly individuals.

The finding also showed that there was a significant and positive relationship between duration savings to last and gender. Higher number of male elderly individuals expected their savings to last longer than female elderly individuals and lesser male elderly individuals who did not expect their savings to last through out retirement years. The report also indicated that there was a significant and positive relationship between estimation retirement savings and gender. Most of the female elderly individuals never tried to figure out how much they need for their retirement.

The finding also showed that there was a significant and positive relationship between financial planning ways and gender. More male elderly individuals planned their finance for their household expenses compared to female individuals.

These finding concurred well with the previous studies by Arrondel et al., (2013), Bucher-Koenen and Lusardi (2011) and Kharchenko (2011) where they proved that males can perform better in financial matters compared to females. Mian (2014) also found that males were more financially literate because they were the ones who made financial decisions for their families.

Moreover, the statistical analyses in this study reported that ethnicity was significant for comfortable retirement, duration saving to last and monitoring spending.

There was a significant and positive relationship between comfortable retirement and ethnicity. Higher numbers of Chinese elderly individuals thought about comfortable retirement and least number of them never thought about money after retirement because they had support from their family and they depend on pension or welfare. Overall, Chinese elderly individuals earned better and they were good in financial planning because of their exposure. The finding in another study which was done in Malaysia by Zurina, Norhasni Zainal and Abdul Razaq (2009) shows that Chinese people were good in retirement planning because most of them work in private sectors and their levels of income was high and this needed them to have a better planning to ensure financial security in future. This finding further reinforced the result of another study done locally by Jariah Masud and Sharifah Azizah Haron (2014). The result proved that Chinese elderly individuals had higher levels of income and they earned more compared to other ethnicity.

The report also indicated that there was a significant and positive relationship between monitoring spending and ethnicity. Although Arora (2014) found that approximately 80 per cent of Indian elderly individuals in India continued working to meet their basic needs in their old age as long as they were physically fit because of limited financial and social protection, in this study the researcher found that higher number of Indian elderly individuals monitored their actual spending compared to other races. This result may be different because the quality of life of Indian people in Malaysia and India was different. According to Arora (2014) in India almost 70 per cent of Indians lived in villages, poor and illiterate and working as manual labour was the only source of livelihood for many; however in Malaysia, a recent report by Malay Mail (2017) indicated that approximately 60 per cent of Indian people either from public or private sectors were doing well financially as they managed to seek for help, enhanced their income levels and increased their quality of life.

In addition, the statistical analyses in this study reported that education level was significant for asset_ownership, comfortable retirement, duration savings to last, estimation retirement saving, financial planning ways and monitoring spending. There was also a significant and positive between ownership of asset and education level. The finding showed when the education level increased, the financial literacy for owning assets increased. The result also depicted that there was also a significant and positive between comfortable retirement and education level. It explained that when the age increased, the financial attitude for comfortable retirement increased. There also a significant and positive between duration savings to last and education level. It clarified that when the age increases, the financial attitude for duration savings to last increased.

There was also a significant and positive between estimation retirement saving and education level. It simplified that when the age increased, the financial attitude to estimate retirement saving increased. There was also a significant and positive between financial planning ways and education level. It depicted that when the age increased, the financial education on financial planning ways increased.

There was also a significant and positive between monitoring spending and education level. It explained that when the age increased, the financial attitude on monitoring spending increased.

These findings were consistent with Lusardi and Mitchell (2011). They found that higher level of educational attainment resulted in a more positive and greater financial literacy. A more recent study by Mohd Fitri Mansor, Chor, Noor Hidayah Abu and Mohd Shahidan Shaari (2015) depicted that education level was considered important in studies related to retirement planning. Even in this study, the descriptive analysis showed that elderly individuals mostly with secondary and above levels of education were better in their financial planning.

Further inferential statistical was done in order to figure out the determinants that significantly determine the financial retirement planning.

Research Question 3: What are the determinants that significantly determine the financial retirement planning?

The Multinomial analysis for the determinants of financial retirement planning depicted that the independent variables like male, duration saving to last (11andaboveyears), productive income, non-productive income, direct dependency, both dependency, neglect spending, financial planning ways through family friends and counseling, aged 64 and below, comfortable retirement because of very confident, and comfortable retirement because of family support were the determinants that significantly determine the financial retirement planning. These determinants significantly influenced on how often elderly individuals set budget target for their spending to meet their financial retirement planning goals.

Interestingly in this analysis, the finding proved that female elderly individuals were more likely than male elderly individuals to set budget for their spending. The findings from several studies showed mixed results. A recent research findings based from a compilation of interviews among smart women from 17 countries like Canada, the USA and Israel by Stewart (2017) proved that nowadays smart women were more structured and disciplined in managing their financial matters, some have higher level of financial literacy and good in investing, and others had the urge to prioritise their personal interests and passions by seeking help from financial advisors.

Contrastingly, another study by HSBC (2014) reported that in Malaysia the saving habits among men and women were almost the same with 47% and 46% respectively because nowadays women were getting the equal chances in education and employment as men and they had higher level of financial literacy they can plan their retirement as they wanted; however, the research depicted that even though women were disciplined budgeters they lack of confidence investing. Another recent report by Rittenhouse (2017) reported that women were lacking in financial confidence and they did not take the risk of investment because of fear.

Result also indicated that elderly individuals who estimated their saving will last for 11 years and above were more likely to set their budget target for spending compared to those who estimated their budget saving will last for less than 11 years. Those who had a bigger picture of their retirement in future tend to set budget for their spending. This was consistent with O'Shea's (2016) finding whereby 20 per cent of individuals' income should be budgeted for unexpected expenditure, for future and for settling debts and saving for retirement should be the priority.

A pertinent finding was found in this analysis whereby elderly individuals who had both productive and non-productive income, they were more likely to set their budget target for spending. Individuals with both productive and non-productive income can set budget target before or after retirement to avoid overspending. This finding was in good agreement with Anspach (2016) where the researcher said that retirement budget was crucial because it enabled individuals to make wise decision about their retirement lifestyle like retire early, travelling more after retirement, having more money and for fulfilling hobbies.

Besides that, those who had both of direct and indirect dependency like either/or parents, parents-in-law, siblings, spouse, children or grandchildren were more likely to set their budget target for spending compared to those who did not have any dependency. Supporting both direct and indirect dependencies financially in this current economic situation can be a challenging task. Thus, the finding in this study showed that elderly individuals who had to support both direct and indirect dependents set their budget target for their spending wisely. This finding was consistent with Trulia's (2016) report on budgeting. She said that setting monthly budget can be overwhelming initially but it was important to know how much money individuals spend and 50 per cent of individuals income should be budgeted for living expenses and essentials.

Findings also indicated that those who talk to family, relatives, co-workers, friends, consult financial planners or advisors or accountants or attend any courses or seminars to teach them to figure out how much was needed for household were more likely to set their budget target for spending compared to those who did not have any financial planning. In another word, individuals can enhance their financial knowledge by discussing with their family, relatives, co-workers, friends, consult financial planners or advisors or accountants or attending any courses or seminars in order to plan for their retirement wisely.

A survey done in America by Lusardi and Mitchell (2011) found that individuals who had financial education were more likely to plan their financial efficiently because they used retirement calculators, attended retirement seminars and asked for assistance and advices from proper channels financial experts, instead of relying on their family or relatives or co-workers to plan their finances. Another survey done in Washington, DC by Clark, d' Ambrosio, McDermed and Sawant (2003) also reported the similar finding whereby the survey result depicted that individuals were likely to reconsider their financial planning for retirement and savings after attending financial education courses.

Another report by Sebi Bhavan (2010) from India showed that peer influence was one of the basis which a lot of investment decisions were made. Individuals tend to invest in same investment options that their friends had invested in. Sebi Bhavan (2010) also reported that individuals tend to purchase many financial products because their relative or close friends pushed them to buy.

The finding in this study also depicted that those elderly individuals who were aged 64 and less were more likely to set budget target for spending compared to those who were aged 65 and above. It explained that elderly individuals became less financially literate when they get older. This finding was contrasting with a study done by Taqadus Bashir, Asba Arshad, Aleena Nazir & Naghmana Afzal (2013). The researchers found that as individual grows older, he or she tend to have more knowledge on financial matters and this aided in retirement planning. In contrast to Taqadus et al. (2013), Beckmann (2013) found that elderly individuals were less financially literate. However, the finding by a study done by Lusardi and Mitchell (2011) and Arrondel et al. (2013) was similar to this study whereby they found that middle aged individuals who aged between 40 and 60 found to be more financially literate.

Another interesting finding in this study was, those elderly individuals who were very confident that they will have enough money to live comfortably throughout their retirement years and those who did not think about having enough money to live comfortably throughout retirement years as their families supported them were more likely to set their budget target compared to those who depend on EPF, pension or welfare. Positive and negative attitude contributed towards the financial planning for retirement. Those who were very confident about their retirement had a positive financial attitude and this attitude urged them to set budget for their spending and saved more for the future. Those who depended on family support after retirement tend to have a perception of not burdening their spouses and children. So, these individuals had the positive attitude to set budget and saved more for their retirement. However, the finding contradicted to another study done by Atkinson and Messy (2012) where they found that half of the Malaysian respondents tend to have negative attitude towards saving money and they had less financial literacy. Specifically, 47 per cent of Malaysians said that they would prefer to spend their money rather than saving it up for the long term and more interestingly 57 per cent of them stated that they live moment by moment and let tomorrow take care of it as it was unpredictable.

Another interesting finding in this analysis was elderly individuals who neglected their actual spending were more likely to set their budget target for spending compared to those who monitored the spending by keeping track of their actual spending. This finding was contrasting with the report on tracking spending by

Sharf (2016). She reported that before setting monthly budget individuals needed to take a note of transactions and note down each expenses that individuals spent for.

Interview. The discussion in this second part of this study was based on the research question stated in the first chapter in the study. As stated earlier the findings in this second part were on the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia.

Research Question 4: What are the impacts of demographic factors, financial literacy factors, financial attitude factors and financial education factors on financial retirement planning of elderly individuals in Malaysia?

Financial planning before retirement and the urge for financial retirement planning. Two main answers have been identified based from the data of ten elderly individuals in the semi-structured interviews. Firstly, most of them believed that financial planning before retirement was essential for the future. Without a proper planning, their retirement will be a disaster especially when they come across financial issues after they retire.

This was in good agreement with a study done locally by Mohd Fitri Mansor, Chor, Noor Hidayah Abu and Mohd Shahidan Shaari (2015). They discovered that people who did not plan retirement well would need to continue working to maintain their living expenses even upon retirement. A current report by Scotiabank (2017) a Canada multinational bank proved that many people were retiring without giving enough importance to personal financial planning. Thus, a proper financial planning was essential to live a good retirement lifestyle.

Secondly, most of them also mentioned that proper financial planning before retirement was important for their children’s wellbeing. This concured well with what Batie (2017) an expert financial advisor reported on the reasons why financial planning is essential. He stated that an important part of financial planning was providing for individual family's financial security. Taking up insurance coverage and policies was a good choice for an individual and his family.

Those who earned more, they had better financial planning for themselves and also for their children. This finding was consistent with a study done by Helmen, Greenwald & Associates, Adam, Copeland and VanDerhei (2014). They found that individuals with higher levels of income and education tend to plan for retirement by having a bigger proportion of saving for retirement.

Importance of mastering financial literacy. Three main answers had been identified through the interviews. First, all the elderly individuals said that financial literacy was needed by people to know the importance of money. Those with financial literacy will know better on how actually money works and how to deal with it. This reinforced the finding on financial literacy by Hung et al, (2009) and Ministry of Education Ontario (2010). They found that economic and financial decisions can be made more confidently to manage financial resources effectively with pertinent financial literacy.

Second, the elderly individuals admitted that people need to master financial literacy in order for them to retire with financial freedom. Financial literacy developed an individual's financial discipline to work towards achieving monetary goals. This finding was consistent with a study done by Cheah et al.(1998) where he found that with financial literacy people can strategised their financial planning to achieve their financial goals and objectives and this effort resulted in a better sense of security and ultimate financial freedom. The finding concured well with another study which was done locally by Tan, Hoe and Hung (2011). They found that there was an urge for individuals to manage their financial well-being especially in planning their financial goals and objectives as success in financial planning would result in financial freedom (Tan, Hoe & Hung, 2011).

Thirdly, nowadays millennials generation were lack of financial planning because they did not have sufficient knowledge and skills to manage their money in the current challenging economic situation and they ended up with disappointments because they had a lot of debts to settle. Thus, financial literacy was important for the millennial generation to plan their retirement.

This finding concurred well with a report by AEGON (2014). The survey report from 15 countries in Americans, Europe and Asia indicated that due to financial constraints on households only 28 per cent of employees had sufficient money to invest for their retirement. This finding also further reinforced the report by Atkinson and Messy (2012). They reported that global monetary crisis associated with higher household well-being and governments all over the world were seeking for opportunity to expose to their people on ways to enhance the level of financial literacy.

Impacts of demographic factors, financial attitude factors, financial literacy factors and financial education factors on financial retirement planning. Three demographic factors were emphasised by the elderly individuals in the interviews; gender, age and education level. In terms of gender, most of the elderly individuals agreed that women were better in financial planning because they were more family oriented than men. This finding was discussed earlier. It was consistent with Stewart (2017) who proved that nowadays smart women were more structured and disciplined in managing their financial matters. However, the finding was contrasting with previous studies done by Arrondel et al., (2013), Bucher-Koenen and Lusardi (2011) and Kharchenko (2011) where they proved that males can perform better in financial matters compared to females.

In terms of age, most of the elderly individuals said that the exposure on financial planning should start since young as they can start planning smartly since young. This finding was in complete agreement with Curtis (2017) who found that young people can start planning since young for their retirement as they had their whole lives ahead and they had ample of time to plan their retirement wisely. This finding was also in consistent with a report by Cassar (2016) who found that financial planning was not only for wealthy and for those who were about to retire. Everyone regardless of wealthy or vice versa should start planning their finance for retirement since young to succeed in their financial planning for retirement. However, many people started thinking about planning for their retirement in their late 40's and this resulted in poor financial planning for retirement. Keating and Marshall (1980) found a similar finding where people were not keen in retirement finances until they were 48 years old and Ferraro and Su (1999) proved that the act of planning for retirement finances late often resulted in lack of savings and lead to psychological distress.

In terms of education level, most of the elderly individuals said even without higher level of education, individuals can plan for their retirement by having the right attitude. There was a high chance for poor financial planning with a lack of financial literacy and educational attainment was related to higher level of financial literacy.

The finding was in strong agreement with a report on adult financial literacy in Australia by ANZ survey (2011). The report depicted that despite of having completed formal post-secondary education; this group of people did not give priority to keep track the finances, or making financial plans for future as they did not have the right financial attitude to do so. However, this finding was contrasting with a study by Lusardi and Mitchell (2011) who found that higher level of educational attainment resulted in a more positive and greater financial literacy.

Financial attitude was the behaviour of people in managing their finance. The data from the interviews depicted that the attitude towards financial management was affected by factor like having to support direct dependency and indirect dependency. When people realised that they had to support their family financially, they tend to develop financial discipline. In this study, the Multinomial analysis finding showed that elderly individuals who had to support both direct and indirect set their budget target for their spending wisely.

This finding was consistent with Trulia's (2016) report on budgeting. She said that setting monthly budget can be overwhelming initially but it was important to know how much money individuals spent and 50 per cent of individuals' income should be budgeted for living expenses and essentials. The finding was also consistent with Cabler (2016) who found that individuals with financial discipline had a better finance situation like having more savings and building more financial security for them and their family. Most of the elderly individuals stated that being aware of financial status was essential as it contributed towards planning for their retirement carefully. Their attitude on being confident with their retirement played a role too in planning for their retirement.

Most of elderly individuals also said that keeping track with actual spending was essential as it contributed towards a proper financial planning for retirement. A financial planning article by LearnVest (2012) did emphasise on the similar view on monitoring spending. In the article it was stated that keeping track with spending was essential as it can help individuals to save a lot of money and avoid overspending and the money which was not used unnecessarily can be saved for the future.

As mentioned earlier in financial literacy factors were essential in planning for retirement. Individuals with good financial literacy education had the pertinent skills and knowledge that were required to make sensible and impactful choices with all of their incomes and assets to plan for their retirement. In the interviews, most of the respondents said that financial literacy was needed to generate extra income and also to increase personal savings.

This finding was consistent with a study done by Lusardi and Mitchell (2013). They found that individuals who had pertinent financial literacy had the skills and knowledge were smart in spending their income accordingly so that they can allocate enough savings for them for retirement. A report by OECD (2013) showed a similar result. It was proven that people need to be financially literate to make proper saving decisions.

Besides that, financial education was also vital in planning for retirement. Financial education can be acquired either formally or informally. Individuals can acquire financial education formally by consulting financial planners or attending financial courses. Individuals can also gain financial education by figuring out opinions and ideas on their own, talk to their family, co-workers, and friends. Sharing information and opinions on saving up for retirement was important because they can have more knowledge on how to plan for retirement. This finding concurred well with findings from several researchers like Ekerdt and Hackney (2002), Ntalianis and Wise (2011), OECD (2012), and Yoong, See and Baronovich (2012). They found that financial education was useful in providing sufficient financial knowledge which aid in retirement planning.

Exposing financial retirement planning conceptual model to Malaysians and the challenges. It was essential to expose knowledge on financial planning since young. All the elderly individuals mentioned that the importance of savings and planning should be exposed since young. They said exposing the financial retirement planning conceptual model directly to young individuals might be irrelevant; however, the importance of saving up can be exposed in school level. They said school students should learn on savings. When they practice the habit on saving up since young, they will not have any difficulties to plan for their retirement once they start working. This study was consistent with a study done locally by Suhaimi Ali (2013). He found that financial education should be exposed at school levels as it aided in retirement planning and sustaining through retirement without any financial hassles. Even OECD (2013) emphasised on exposing financial education in schools. Even Klapper and Panos (2011) found the similar finding. They found that even in Russia financial education should not start when one started working; in fact, it should be exposed to the younger generation in schools.

Elderly individuals said that besides exposing financial education in schools, the most convenient and fastest way of channelling financial retirement planning conceptual model was through media like television, radio, newspaper and also internet. There was lack of exposure of financial knowledge in media. Malaysians can learn on how to plan their retirement by gaining knowledge through media as many millennial generation prefer to use media often. This finding concurred well with a report done by Prosper Canada Centre for Financial Literacy (2015). The report on financial literacy clearly indicated that many people did not explore on financial literacy resources because they were not aware of them. Thus, one of the best ways to expose to public on financial education was through media.

More than half of the elderly individuals said that implementing financial education through policy was another pertinent way of exposing financial retirement planning conceptual model to people especially in the current challenging economic situation. This finding was in good agreement with Fernandes, Lynch and Netemeyer (2014). They found policy makers concluded that financial education was very important to make financial choices in the global monetary crisis period. Implementing policy on financial planning had been a great concern among policy makers and several reports have proven it. OECD (2009), Olima (2013) and Miller, Godfrey, Levesque and Stark, (2009) reports depicted that global monetary crisis had created a great concern among worldwide policy makers who were worried about financial illiteracy.

One elderly individual who was an educationist mentioned that financial retirement planning conceptual model can be exposed through workshops, seminars and conference. Those who attended these seminars and workshops usually were keen to learn on financial planning. Even though there were a number of workshops, seminars and conferences on financial retirement planning, there are lack of exposure on this important matter.

Even though the idea of exposing the financial retirement planning conceptual model was a great way to enhance the financial education, there were several challenges in exposing the idea. In the interviews, elderly individuals said that some people might not accept the ideas on financial planning for retirement. Besides that, policy makers may reject the idea of financial planning conceptual mode that was developed in this study and they might even criticise the findings of this study. Another challenge was how the researcher wanted to promote the results and what the policy recommendations were in study.

Other determinants that affect financial retirement planning. In this study, demographic factors, financial literacy factors, financial attitude factors and financial education factors were analysed as the determinants that affected financial retirement planning. Through the interviews, there were other financial retirement planning determinants found as well.

Elderly individuals mentioned that setting monetary goals was essential in planning for retirement. They said that by having relevant goals, people can start making plans to achieve their monetary goals. This concurred well with a study done locally by Tan, Hoe and Hung (2011). They reported that it was important for people their plan their financial goals and objectives because in planning so it would result in financial freedom. Elderly individuals needed guidance on financial planning to set their goals.

This was found by another researcher Fontinelle (2017) who reported that financial planning guided individuals to review their financial goals and took necessary steps to review, update and fulfill the goals. Another study reported a similar finding. Busch, Dittrich and Lieberum (2010) found that individuals set clear goals to plan their future upon retirement and by setting specific goals, individuals developed behaviours that influence their decisions.

Exposure was found to be another determinant of financial retirement planning. Right exposure lead to proper financial retirement planning. One of it was exposure from family background. Influence of family members in encouraging individuals to plan for their retirement was beneficial. This finding concurred well with a study done by Collinson (2013) who found that one of the essential key elements for "retirement readiness" was having an understanding family. He or she can actually had an open discussion about finance matters and agreement on any expectations of support. Exposure from right group of friends was also essential. A lot of ideas were shared among friends especially with those who had good financial planning background.

Awareness was another important determinant in financial retirement planning. People should have the concern about the surrounding financial situation. People from different level of SES planned their financial matters differently according to their level of awareness. When they were aware of their financial status, they can plan for their retirement well. A framework by Financial Literacy and Education Commission in the United States (2011) depicted that it was essential to expose everyone on the awareness of and access to effective financial education resources in promoting financial success. Lifestyle determined the outcome of financial retirement planning. The way people lived their lives will determine whether they can save up for their retirement or they spend lavishly without thinking about their retirement. If individuals were aware of their surrounding financial situation, they will know how to practice their lifestyle.

Financial Retirement Planning Conceptual Model

Analysis of logistic regressions and interviews of data collected from the sample of elderly individuals from Klang Valley resulted in developing a financial retirement planning conceptual model for Malaysians as illustrated in Figure 3.4. The conceptual model consists of all the financial retirement planning determinants analysed in this study and also another additional determinant which is psychological factors.

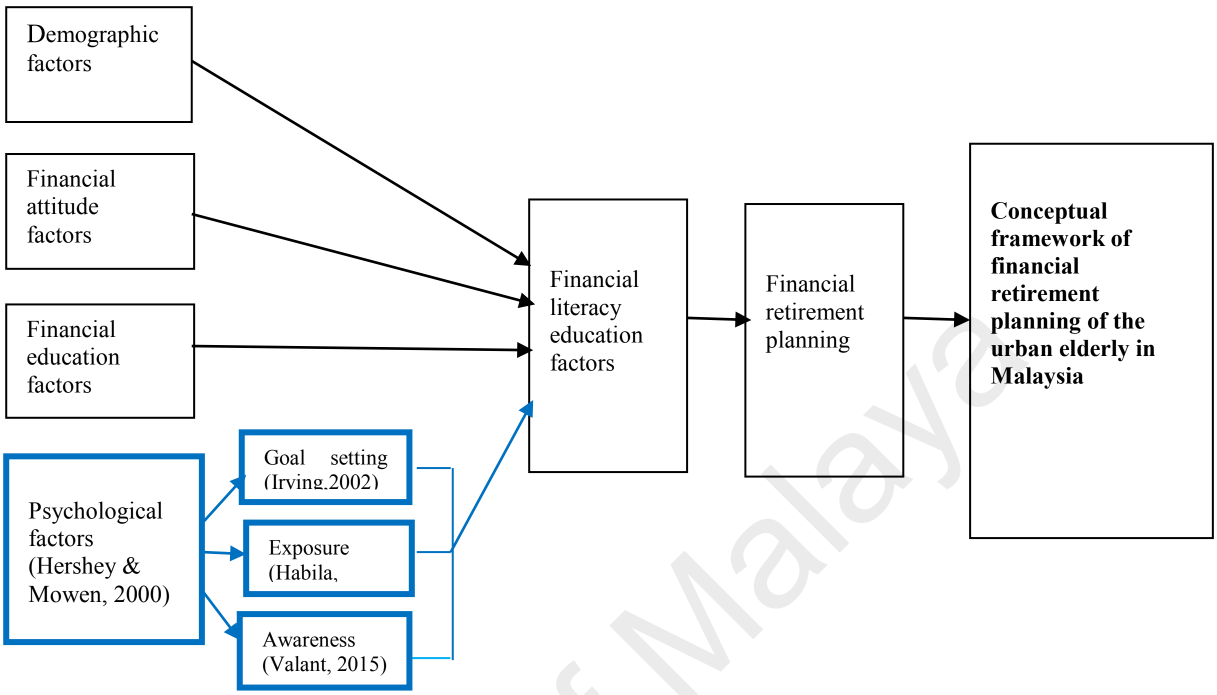

Figure 5.1 Conceptual model of financial retirement planning of the urban elderly in Malaysia

The conceptual model developed from this study was more useful because psychological factors identified in this study seem to have effect on financial retirement planning. The additional relationship identified between psychological factors and financial retirement planning was supported in the literature.

Hershey and Mowen (2000) proved that personality constructs was a significant determinant of pre-retirement planning and they found that very less studies conducted to figure out the effect of psychological factors on pre-retirement and financial planning decisions. Setting goals for financial retirement planning was an aspect of psychological well-being. Goals were significant in lives as valuable goals contributed to well-being of people. Irving (2012) stated that one of the key features of financial planning was identifying financial and lifestyle goals. Emmons

(2003) also mentioned in his study that the fundamental to a wisdom psychological well-being were goals and without goals life would be lack of organisation and determination.

Exposure to financial literacy education was essential in financial retirement planning. Individuals who were exposed to financial literacy education learnt the proper ways to plan for their retirement. Lusardi and Mitchell (2011) carried out a study on financial literacy in the United States and found that people with financial literacy education planned for their retirement well and this resulted in better living after retirement. A study done in Illinois, the United States by Habila (2015) proved that the psychological aspect of individuals taking the initiative to learn on financial literacy was useful in making wise financial decisions. The research also emphasised that, in this era people needed to have pertinent financial literacy education to make more financial decisions like to determine their own retirement income, understand their savings process and recognise the need to have enough savings to achieve retirement objectives. Income was one of the important components in planning for retirement. The saving plan for every individual was different based on several factors. Income level was proven to be one of the essential determinants that aided individuals to plan on how much to save (Teachers Insurance and Annuity Association of America (TIAA) - College Retirement Equities Fund (CREF), TIAA-CREF, 2014).

In addition, another study on financial literacy and retirement planning conducted by Bucher-Koenen and Lusardi (2011) in Germany depicted that individuals with lower range of income had lesser levels of financial literacy, even upon controlling for differences in socioeconomic status. Munnell, Webb and Chen

(2016) also found that individuals with low-SES households were unprepared to retire.

However, it was also said that regardless of income levels, individuals can plan to save for their retirement (TIAA-CREF, 2014). It was known that financial literacy education was essential for individuals from various income level groups. By equipping oneself with financial literacy education, planning for retirement was possible. Besides that, exposure from family and friends on financial planning ways was good as those who had good financial background can share more ideas on how to plan for retirement.

Financial awareness was also another important element in planning for retirement. The psychological habit of every individual to be aware of their financial status contributed towards a proper financial planning for the future especially upon retirement. Valant (2015) stated that financial literacy included the awareness of financial products and services around people and also understanding the risks related to the products and services. People needed to be aware of financial matters around them so that they can be able to make better and more informed decisions in planning for their retirement.

Overall, psychological factors identified in this study were proven to affect financial retirement planning. Thus, the combination of all the determinants in the conceptual framework developed based from the findings in this study would be beneficial for people to face the financial environment that had become dramatically more complex than last time.

Conclusion

The determinants of financial retirement planning did influence the planning for retirement among Malaysian elderly individuals who are aged 55 and above. The findings of the current study are proven to support the above statement. The current study depicts several interesting findings which are not comprehensible with other studies on retirement planning which are done locally. For instance, the current study proves that owning luxury amenities and minimum monthly expenses are vital determinants of managing monthly expenditure for elderly.

Moreover, it is also proves that ethnicity acts as a significant demographic factor for comfortable retirement, duration saving to last and monitoring spending. Interestingly, findings from this current study also revealed that women are better in planning for retirement. A financial retirement planning conceptual model which consists of demographic factors, financial attitude factors, financial education factors, financial literacy factors and also psychological factors are derived based on the findings of this current thesis. This conceptual model is not similar with other local studies. The combinations of these factors contribute towards a more successful and effective financial retirement planning. This study can be useful not only for Malaysians but also for other countries who give importance to financial retirement planning.

Implications and Suggestions

The overall findings in this current study have a number of implications on policy makers, future retirees and younger generation. This study has contributed to the development of conceptual model of financial retirement planning based on Malaysian context. It is developed with the aim to fulfil the needs of elderly individuals to plan their retirement by including the financial planning determinants needed for a well-planned retirement.

Policy makers. The findings in this current study are beneficial for everyone. In this current economic situation many working-age adults are facing challenges in planning for their retirement as they are lack of financial awareness and exposure. Many are not familiar with the basics of financial planning concepts to make sound saving and investment decisions. Thus, policy makers ought to imply the conceptual model to the working population in Malaysia to enhance the financial literacy education.

Policy makers should expose the awareness on financial retirement planning to every working individual regardless of their Socio Economic Status (SES). It is also essential for policy makers to imply the findings of this current study because there is a rapid increase of ageing population in this world including Malaysia and many of them need to be aware of their financial status to plan for their retirement. Moreover, government could also consider these findings as the initiative for them to expose more financial education programmes to Malaysians as they can improve Malaysians' financial literacy in the earlier stage of working life so that they can have a better financial retirement planning. In brief, the outcome of this current study should be spread to Malaysians so that they realise the importance of financial planning for retirement and give importance to the determinants of financial retirement planning.

Future retirees. Many working-age adults in Malaysia are proven to have less financial literacy education and due to this factor many are facing financial difficulties upon retirement. Hence, the findings from the current study could be useful for future retirees. Those who are working can adapt some useful ideas from the conceptual model developed from this study and start planning for their retirement.

Most future retirees would not anticipate the expenditure that they may come across upon retirement as mostly depend on pension, EPF and family as pillars of financial support and mostly end up with frustration because they do not have sufficient money for extra or unexpected expenditure. For this reason, they should be exposed to the importance of financial retirement planning so that they will realise that they should actually start planning for their retirement earlier to have extra savings to live their retirement lifestyle as they wished for.

Younger generation. It is very important to expose the awareness on financial planning for younger generation because saving up and investing for retirement cannot be accomplished in one night. It requires a long term planning and determination. It is vital to spread the awareness on financial planning for retirement to younger generation as they can start saving up consistently at a younger age and when they successfully develop the habit of saving since young, they will plan for retirement well.

The number of ageing population is increasing yearly. This could be a challenging situation for government and private sectors to support retirees financially. Thus, younger generation should be aware of this situation and they need to acquire proper financial knowledge and skills to prepare themselves to spend more on their health care and to maintain their social status that they earned while working upon their retirement. The findings of this study could also be impactful for younger generation because they realise that even with secured jobs they find it difficult to save up money as the rising cost of goods and services.

Financial education. There are many elderly who have not equipped themselves with sufficient level of financial education. Many of them are not well versed in basic financial concepts needed in making pertinent saving and investments decisions. This affects the overall saving, retirement planning, retirement and other financial decisions. Thus, financial education should be exposed to elderly to aid them in planning their retirement well. Many should also attend financial courses and seminars to gain more financial knowledge on managing their finance well and increase their retirement saving. By attending financial courses and seminars, elderly may become wiser and diligent in handling their money.

It is also essential for elderly with lesser level of education and least wealthy to attend courses and seminars to learn on how to accumulate more wealth for their retirement despite of having financial obstacles. Financial education aids elderly in developing the skills and confidence to become more alert of risks on financial matters and the financial opportunities. It would be easier for them to know where to go and seek for help and take effective actions to enhance their financial well-being and plan for their retirement. So, the findings of this study could help elderly individuals to make complex financial decisions for retirement planning, accumulating wealth, avoiding debts and utilising their pensions relevantly.

Limitations of the Study

There are a number of limitations in this study. Firstly, is the availability of sample which represents the population in Malaysia. Overall, the samples in this study are from Klang Valley. It is difficult to get the same amount of sample from Malay, Chinese and Indian ethnicities especially from Klang Valley. Majority samples are from either Malay or Chinese. Indian samples are always the minority.

In the first cohort of survey interview, the majority respondents are Malay. Their opinions on financial literacy and planning would be affected by their cultural background. In contrast, in the second cohort of survey, the number of Chinese respondents is the highest compared to Malay, Indian and others. So, their opinions would be different due to their cultural background.

Secondly, the limitation is in terms of financial retirement planning questions in the survey questionnaire. The questions developed for survey in MELOR project consisted of questions from multiple faculties especially a lot of medical questions were administrated to the respondents. Thus, only a limited amount of questions on financial retirement planning were included in first and second cohort of survey.

Thirdly, the limitation is identified during interviews. Several participants withdraw from the study during the last minute. However, researchers had extra names of participants as backups. Therefore, the researcher successfully completed ten interviews. The interviews were done individually at ten different venues according to participants' choices and preferences. Thus, the overall duration to complete ten interviews took a longer time than expected.

Recommendations for Future Research

There are a number of recommendations for further research derived from this study. First and foremost, future researchers who are interested in conducting studies on financial retirement planning should replicate this study on a larger scale by comparing the financial retirement planning determinants within both urban and rural elderly individuals. This is useful as the researchers can figure out the determinants that affect financial retirement planning between urban and rural elderly individuals because the lifestyle of urban and rural elderly individuals may be different. It will be interesting to compare the results.

Besides that, future researchers should also include psychological determinants such as goal setting, exposure and awareness. These determinants are essential contributing factors in planning for retirement. The mental and emotional state of an individual is an important aspect to be studied because regardless of the financial literacy that the individual has, the initiative to plan for retirement should start from within. Thus, future researchers can figure out whether psychological determinants affect elderly individuals from both urban and rural areas.

Furthermore, future researchers should also compare the determinants which contribute to financial retirement planning between low, medium and high income group of people. It will be interesting to find the results as these groups of people may have different perceptions on the determinants and they also may have different ways of planning their finance for retirement.

Last but not least, this study also recommends conducting another study with working people who are aged less than 55 years old as samples to compare the findings with the current study. It will be different to compare the findings as working people who are aged less than 55 years old and working people who are aged more than 55 years old may have different opinions on the financial retirement planning determinants.

Summary

Overall, chapter 5 provides the overall summary of this study, discussions of the findings for the two major parts on this study; part one is survey and part two is interview, the conceptual model derived based from the findings, implications and suggestions of the findings, limitations of the overall study, recommendations for future researchers who are keen to carry out studies on financial retirement planning and also a brief summary of the overall chapter.

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